

APPENDICES

APPENDIX A

***New Hampshire
Surface Water Quality
Laws and Regulations***

TITLE 50

Water Management And Protection

CHAPTER 485A

Water Pollution and Waste Disposal

Classification of Waters

SECTION 485-A:8

§ 485-A:8 Standards for Classification of Surface Waters of the State. – It shall be the overall goal that all surface waters attain and maintain specified standards of water quality to achieve the purposes of the legislative classification. For purposes of classification there shall be 2 classes or grades of surface waters as follows:

I. Class A waters shall be of the highest quality and shall contain not more than either a geometric mean based on at least 3 samples obtained over a 60-day period of 47 *Escherichia coli* per 100 milliliters, or greater than 153 *Escherichia coli* per 100 milliliters in any one sample; and for designated beach areas shall contain not more than a geometric mean based on at least 3 samples obtained over a 60-day period of 47 *Escherichia coli* per 100 milliliters, or 88 *Escherichia coli* per 100 milliliters in any one sample; unless naturally occurring. There shall be no discharge of any sewage or wastes into waters of this classification. The waters of this classification shall be considered as being potentially acceptable for water supply uses after adequate treatment.

II. Class B waters shall be of the second highest quality and shall have no objectionable physical characteristics, shall contain a dissolved oxygen content of at least 75 percent of saturation, and shall contain not more than either a geometric mean based on at least 3 samples obtained over a 60-day period of 126 *Escherichia coli* per 100 milliliters, or greater than 406 *Escherichia coli* per 100 milliliters in any one sample; and for designated beach areas shall contain not more than a geometric mean based on at least 3 samples obtained over a 60-day period of 47 *Escherichia coli* per 100 milliliters, or 88 *Escherichia coli* per 100 milliliters in any one sample; unless naturally occurring. There shall be no disposal of sewage or waste into said waters except those which have received adequate treatment to prevent the lowering of the biological, physical, chemical or bacteriological characteristics below those given above, nor shall such disposal of sewage or waste be inimical to aquatic life or to the maintenance of aquatic life in said receiving waters. The pH range for said waters shall be 6.5 to 8.0 except when due to natural causes. Any stream temperature increase associated with the discharge of treated sewage, waste or cooling water, water diversions, or releases shall not be such as to appreciably interfere with the uses assigned to this class. The waters of this classification shall be considered as being acceptable for fishing, swimming and other recreational purposes and, after adequate treatment, for use as water supplies. Where it is demonstrated to the satisfaction of the department that the

class B criteria cannot reasonably be met in certain surface waters at all times as a result of combined sewer overflow events, temporary partial use areas shall be established by rules adopted under RSA 485-A:6, XI-c, which meet, as a minimum, the standards specified in paragraph III.

III. The waters in temporary partial use areas established under paragraph II shall be free from slick, odors, turbidity, sludge deposits, and surface-floating solids of unreasonable kind or quantity, shall contain not less than 5 parts per million of dissolved oxygen; shall have a hydrogen ion concentration within the range of pH 6.0 to 9.0 except when due to natural causes; and shall be free from chemicals and other materials and conditions inimical to aquatic life or the maintenance of aquatic life. These criteria shall apply during combined sewer overflow discharges and up to 3 days following cessation of said discharge. At all other times the standards and uses specified in paragraph II shall apply.

IV. Notwithstanding anything contained in this chapter, the department in submitting classifications relating to interstate waters to the New England Interstate Water Pollution Control Commission for review and approval, as provided for under the terms of Article V of the compact whereby the interstate commission was created by RSA 484, shall submit such classifications in accordance with the standards of water quality as currently adopted by said interstate water pollution control commission provided, however, that the standards for any classification thus submitted for review and approval shall not be less than, nor exceed the standards of the classification duly adopted by the General Court as provided for in RSA 485-A:9 or 10.

V. Tidal waters utilized for swimming purposes shall contain not more than either a geometric mean based on at least 3 samples obtained over a 60-day period of 35 enterococci per 100 milliliters, or 104 enterococci per 100 milliliters in any one sample, unless naturally occurring. Those tidal waters used for growing or taking of shellfish for human consumption shall, in addition to the foregoing requirements, be in accordance with the criteria recommended under the National Shellfish Program Manual of Operation, United States Department of Food and Drug Administration.

VI. Notwithstanding anything contained in this chapter, the commissioner shall have the authority to adopt such stream classification criteria as may be issued from time to time by the federal Environmental Protection Agency or its successor agency insofar as said criteria may relate to the water uses specified in RSA 485-A:8, I and II, provided, however, that the criteria thus issued shall not result in standards that are less than nor exceed the standards of the classification duly enacted by the general court as provided for in RSA 485-A:9 or 485-A:10.

VII. All tests and sampling for the purposes of examination of waters shall be performed and carried out in a reasonable manner and whenever practicable, in accordance with the commonly accepted scientific method as selected by the department. The waters in each classification shall satisfy all the provisions of all lower classifications. The minimum treatment for the lowest classification shall be as follows:

(a) For sewage, secondary treatment and disinfection as necessary to comply with water quality standards.

(b) For industrial wastes and combined sewer overflows, such treatment as the department shall determine. Appeal from any such determination shall be in the manner provided for in RSA 21-O:14.

VIII. In prescribing minimum treatment provisions for thermal wastes discharged to interstate waters, the department shall adhere to the water quality requirements and recommendations of the New Hampshire fish and game department, the New England Interstate Water Pollution Control Commission, or the United States Environmental Protection Agency, whichever requirements and recommendations provide the most effective level of thermal pollution control.

IX. Subject to the provisions of RSA 485-A:13, I(a), the fish and game department may use rotenone or similar compounds in the conduct of its program to reclaim the public waters of the state for game fishing.

Source. 1989, 339:1. 1991, 371:3-5, eff. Aug. 31, 1991. 1996, 228:77, 106, 110, eff. July 1, 1996. 1998, 63:1, eff. July 11, 1998.

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

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CHAPTER Env-Ws 1700 SURFACE WATER QUALITY REGULATIONS

PART Env-Ws 1701 INTRODUCTION

Statutory Authority: RSA 485-A:8, VI

REVISION NOTE:

Document #7151, effective 12-10-99, made extensive changes to the wording, format, structure, and renumbering of rules from Chapter Env-Ws 430 now Chapter Env-Ws 1700. Document #7151 supersedes all prior filings for the sections in this chapter. The prior filings for former Chapter Env-Ws 430 include the following documents:

#1881, eff 12-7-81
#2707, eff 5-15-84; EXPIRED 5-15-90
#4896, eff 8-3-90
#6301, INTERIM, eff 8-2-96; EXPIRES 11-30-96
#6351, eff 10-5-96

The rules in former Chapter Env-Ws 430 have been renumbered, amended and incorporated into Chapter Env-Ws 1700 as follows:

Env-Ws 1701.01 Purpose. The purpose of these rules is to establish water quality standards for the state's surface water uses as set forth in RSA 485-A:8, I, II, III and V. These standards are intended to protect public health and welfare, enhance the quality of water and serve the purposes of the Clean Water Act and RSA 485-A. These standards provide for the protection and propagation of fish, shellfish, and wildlife, and provide for such uses as recreational activities in and on the surface waters, public water supplies, agricultural and industrial uses, and navigation in accord with RSA 485-A:8, I and II.

Source. #7151, eff 12-10-99

Env-Ws 1701.02 Applicability.

(a) These rules shall apply to all surface waters.

(b) These rules shall apply to any person who causes point or nonpoint source discharge(s) of pollutants to surface waters, or who undertakes hydrologic modifications, such as dam construction or water withdrawals, or who undertakes any other activity that affects the beneficial uses or the level of water quality of surface waters.

Source. #7151, eff 12-10-99

PART Env-Ws 1702 DEFINITIONS

Env-Ws 1702.01 "Acute toxicity" means an adverse effect such as mortality or debilitation caused by an exposure of 96 hours or less to a toxic substance.

Source. #7151, eff 12-10-99

Env-Ws 1702.02 "Antidegradation" means a provision of the water quality standards that maintains and protects existing water quality and uses.

Source. #7151, eff 12-10-99

Env-Ws 1702.03 "Assimilative capacity" means the amount of a pollutant or pollutants that can safely be released to a waterbody without causing violations of applicable water quality criteria or negatively impacting uses.

Source. #7151, eff 12-10-99

Env-Ws 1702.04 "Benthic community" mean the community of plants and animals that live on, over, or in the substrate of the surface water.

Source. #7151, eff 12-10-99

Env-Ws 1702.05 "Benthic deposit" means any sludge, sediment or other organic or inorganic accumulations on the bottom of the surface water.

Source. #7151, eff 12-10-99

Env-Ws 1702.06 "Best management practices" means those practices which are determined, after problem assessment and examination of all alternative practices and technological, economic and institutional considerations, to be the most effective practicable means of preventing or reducing the amount of pollution generated by point or nonpoint sources to a level compatible with water quality goals.

Source. #7151, eff 12-10-99

Env-Ws 1702.07 "Biological integrity" means the ability of an aquatic ecosystem to support and maintain a balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of similar natural habitats of a region.

Source. #7151, eff 12-10-99

Env-Ws 1702.08 "Biota" means species of plants or animals occurring in surface waters.

Source. #7151, eff 12-10-99

Env-Ws 1702.09 "CFR" means the Code of Federal Regulations published by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Source. #7151, eff 12-10-99

Env-Ws 1702.10 "Chronic toxicity" means an adverse effect such as reduced reproductive success or growth, or poor survival of sensitive life stages, which occurs as a result of prolonged exposure to a toxic substance.

Source. #7151, eff 12-10-99

Env-Ws 1702.11 "Class A and B waters" means those surface waters that are legislatively classified as Class A or B waters pursuant to RSA 485-A:8, I, II and III.

Source. #7151, eff 12-10-99

Env-Ws 1702.12 "Clean Water Act" means the Federal Clean Water Act, Pub. L. 92-500 as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, Pub. L. 97-117, Pub. L. 100-4, 33 USC 1251 et seq.

Source. #7151, eff 12-10-99

Env-Ws 1702.13 "Community" means one or more populations co-occurring in surface waters.

Source. #7151, eff 12-10-99

Env-Ws 1702.14 "Criterion" means:

(a) A designated concentration of a pollutant;

(b) A narrative statement concerning that pollutant that when not exceeded, will protect an organism, a population, a community, or a prescribed water use; or

(c) A numeric value or narrative statement related to other characteristics of the surface waters, such as flow and biological community integrity.

Source. #7151, eff 12-10-99

Env-Ws 1702.15 "Cultural eutrophication" means the human-induced addition of wastes containing nutrients to surface waters which results in excessive plant growth and/or a decrease in dissolved oxygen.

Source. #7151, eff 12-10-99

Env-Ws 1702.16 "Department" means the department of environmental services.

Source. #7151, eff 12-10-99

Env-Ws 1702.17 "Designated uses" means those uses specified in water quality standards for each waterbody or segment whether or not such uses are presently occurring.

Source. #7151, eff 12-10-99

Env-Ws 1702.18 "Discharge" means:

(a) The addition, introduction, leaking, spilling, or emitting of a pollutant to surface waters, either directly or indirectly through the groundwater, whether done intentionally, unintentionally, negligently or otherwise; or

(b) The placing of a pollutant in a location where the pollutant is likely to enter surface waters.

Source. #7151, eff 12-10-99

Env-Ws 1702.19 "Dissolved oxygen" (D.O.) means the oxygen dissolved as a gas in sewage, water or other liquid expressed in milligrams per liter (mg/l), parts per million (ppm), or percent saturation.

Source. #7151, eff 12-10-99

Env-Ws 1702.20 "Effluent limitation(s)" means any restriction(s) imposed by the department pursuant to RSA 485-A on quantities, discharge rates, characteristics, and concentrations of pollutants which are discharged to surface waters.

Source. #7151, eff 12-10-99

Env-Ws 1702.21 "EPA" means the United States Environmental Protection Agency.

Source. #7151, eff 12-10-99

Env-Ws 1702.22 "Epilimnion" means the upper, well-circulated warm layer of a thermally stratified lake, pond, impoundment or reservoir.

Source. #7151, eff 12-10-99

Env-Ws 1702.23 "Existing uses" means those uses, other than assimilation or waste transport, which actually occurred in the waterbody on or after November 28, 1975, whether or not they are included in the water quality standards.

Source. #7151, eff 12-10-99

Env-Ws 1702.24 "High quality surface waters" means all surface waters whose water quality is better than required by any aquatic life and/or human health water quality criteria contained in these rules or other criteria assigned to the surface water, or whose qualities and characteristics make them critical to the propagation or survival of important living natural resources.

Source. #7151, eff 12-10-99

Env-Ws 1702.25 "Industrial waste" means "industrial waste" as defined in RSA 485-A:2, VI, namely "any liquid, gaseous or solid waste substance resulting from any process of industry, manufacturing trade or business or from development of any natural resources."

Source. #7151, eff 12-10-99

Env-Ws 1702.26 "Maintain and protect" means to preserve the existing and designated uses of surface waters.

Source. #7151, eff 12-10-99

Env-Ws 1702.27 "Mixing zone" means a defined area or volume of the surface water surrounding or adjacent to a wastewater discharge where the surface water, as a result of the discharge, might not meet all applicable water quality standards.

Source. #7151, eff 12-10-99

Env-Ws 1702.28 "Most sensitive use" means the use which is most susceptible to degradation by a specific pollutant, combination of pollutants, or activity, such as:

- (a) Drinking;
- (b) Swimming;
- (c) Boating;
- (d) Fish and aquatic life propagation;
- (e) Fish consumption by higher level consumers including man; or
- (f) Irrigation.

Source. #7151, eff 12-10-99

Env-Ws 1702.29 "Naturally occurring conditions" means conditions which exist in the absence of human influences.

Source. #7151, eff 12-10-99

Env-Ws 1702.30 "Nephelometric turbidity unit" or "NTU" means a standard used to measure the optical property that causes light to be scattered and absorbed rather than transmitted in straight lines through water, as measured by a nephelometer.

Source. #7151, eff 12-10-99

Env-Ws 1702.31 "Noncontact cooling water" means water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product or finished product and to which no pollutants, other than heat, have been added.

Source. #7151, eff 12-10-99

Env-Ws 1702.32 "Nonpoint source" means any source other than a point source as defined in Env-Ws 1702.38.

Source. #7151, eff 12-10-99

Env-Ws 1702.33 "No observed effect concentration" (NOEC) means the highest measured continuous concentration, in percent, of an effluent at which no adverse effects are observed on the aquatic test organisms.

Source. #7151, eff 12-10-99

Env-Ws 1702.34 "Nuisance species" means any species of flora or fauna living in or near the water whose noxious characteristics or presence in sufficient number or mass prevent or interfere with a designated use of those surface waters.

Source. #7151, eff 12-10-99

Env-Ws 1702.35 "Other wastes" means "other wastes" as defined in RSA 485-A:2, VIII, namely, "garbage, municipal refuse, decayed wood, sawdust, shavings, bark, lime, ashes, offal, oil, tar, chemicals and other substances other than sewage or industrial wastes, and any other substance harmful to human, animal, fish, or aquatic life."

Source. #7151, eff 12-10-99

Env-Ws 1702.36 "Outstanding Resource Water" or "ORW" means surface waters of exceptional recreational or ecological significance.

Source. #7151, eff 12-10-99

Env-Ws 1702.37 "pH" means a measure of the hydrogen ion concentration in a solution, expressed as the logarithm to the base 10, of the reciprocal of the hydrogen ion concentration in gram moles per liter.

Source. #7151, eff 12-10-99

Env-Ws 1702.38 "Point source" means a discernible, confined, and discrete conveyance from which pollutants are or might be discharged, excluding return flows from irrigated agriculture or agricultural stormwater runoff, and including but not limited to a:

- (a) Pipe;
- (b) Ditch;

- (c) Channel;
- (d) Tunnel;
- (e) Conduit;
- (f) Well;
- (g) Discrete fissure;
- (h) Container;
- (i) Rolling stock;
- (j) Concentrated animal feeding operation; or
- (k) Vessel or other floating craft.

Source. #7151, eff 12-10-99

Env-Ws 1702.39 "Pollutant" means "pollutant" as defined in 40 CFR 122.2.

Source. #7151, eff 12-10-99

Env-Ws 1702.40 "Pollution" means the man-made or man-induced alteration of the chemical, physical, biological, or radiological integrity of water.

Source. #7151, eff 12-10-99

Env-Ws 1702.41 "Population" means a group of individuals of one biological species co-occurring in time and space.

Source. #7151, eff 12-10-99

Env-Ws 1702.42 "Publicly owned treatment works" (POTW) means any device or system used in the treatment of municipal sewage and/or industrial wastewater which is owned by the state, or a political subdivision of the state.

Source. #7151, eff 12-10-99

Env-Ws 1702.43 "Radio nuclide" means a radioactive atomic nucleus specified by its atomic number, atomic mass and energy state.

Source. #7151, eff 12-10-99

Env-Ws 1702.44 "7Q10" means the lowest average flow which occurs for 7 consecutive days on an annual basis with a recurrence interval of once in 10 years on average, expressed in terms of volume per time period.

Source. #7151, eff 12-10-99

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Env-Ws 1702.45 "Sewage" means "sewage" as defined in RSA 485-A:2, X, namely, "the water carried waste products from buildings, public or private, together with such groundwater infiltration and surface water as may be present."

Source. #7151, eff 12-10-99

Env-Ws 1702.46 "Surface waters" means "surface waters of the state" as defined in RSA:485-A:2, XIV and waters of the United States as defined in 40 CFR 122.2.

Source. #7151, eff 12-10-99

Env-Ws 1702.47 "Tainting substance" means any material that can impart objectionable taste, odor, or color to the flesh of fish or other edible aquatic organisms.

Source. #7151, eff 12-10-99

Env-Ws 1702.48 "Tidal waters" means those portions of the Atlantic Ocean within the jurisdiction of the state, and other surface waters subject to the rise and fall of the tide.

Source. #7151, eff 12-10-99

Env-Ws 1702.49 "Toxicity test" means a test to determine the toxicity of a chemical or an effluent that involves exposing test organisms in a laboratory setting to one or more concentrations of the chemical or dilutions of the effluent in accordance with standard laboratory procedures.

Source. #7151, eff 12-10-99

Env-Ws 1702.50 "Toxic unit chronic" (TU_c) means the reciprocal of the effluent dilution that causes no unacceptable effect to the test organisms by the end of the chronic exposure period. The TU_c can be calculated by dividing 100 by the chronic NOEC value.

Source. #7151, eff 12-10-99

Env-Ws 1702.51 "Waste" means "industrial waste" as defined in RSA 485-A:2, VI, and "other wastes" as defined in RSA 485-A:2, VIII.

Source. #7151, eff 12-10-99

Env-Ws 1702.52 "Water quality standards" means the combination of designated uses of surface waters and the water quality criteria for such surface waters based upon such uses.

Source. #7151, eff 12-10-99

Env-Ws 1702.53 "Wetland" means "wetland" as defined in Wt 101.87, namely "an area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands include, but are not limited to, swamps, marshes, bogs and similar areas as delineated in accordance with Wt. 301.01.

Source. #7151, eff 12-10-99

Env-Ws 1702.54 "Zone of passage" means an area bordering a mixing zone and which is free from pollutants and which allows for unobstructed movement of aquatic organisms.

Source. #7151, eff 12-10-99

PART Env-Ws 1703 WATER QUALITY STANDARDS

Env-Ws 1703.01 Water Use Classifications.

(a) State surface waters shall be divided into class A and class B, pursuant to RSA 485-A:8, I, II and III. Each class shall identify the most sensitive use which it is intended to protect.

(b) All surface waters shall be restored to meet the water quality criteria for their designated classification including existing and designated uses, and to maintain the chemical, physical, and biological integrity of surface waters.

(c) All surface waters shall provide, wherever attainable, for the protection and propagation of fish, shellfish and wildlife, and for recreation in and on the surface waters.

(d) Unless the flows are caused by naturally occurring conditions, surface water quantity shall be maintained at levels adequate to protect existing and designated uses.

Source. #7151, eff 12-10-99

Env-Ws 1703.02 Wetlands Criteria.

(a) Subject to (b) below, wetlands shall be subject to the criteria listed in this part.

(b) Wherever the naturally occurring conditions of the wetlands are different from the criteria listed in these rules, the naturally occurring conditions shall be the applicable water quality criteria.

Source. #7151, eff 12-10-99

Env-Ws 1703.03 General Water Quality Criteria.

(a) The presence of pollutants in the surface waters shall not justify further introduction of pollutants from point and/or nonpoint sources.

(b) State surface waters shall retain their legislated classification even if they fail to meet any or all of the general, class-specific, or toxic criteria contained in this part.

(c) The following physical, chemical and biological criteria shall apply to all surface waters:

(1) All surface waters shall be free from substances in kind or quantity which:

- a. Settle to form harmful deposits;
- b. Float as foam, debris, scum or other visible substances;
- c. Produce odor, color, taste or turbidity which is not naturally occurring and would render it unsuitable for its designated uses;
- d. Result in the dominance of nuisance species; or
- e. Interfere with recreational activities;

(2) The level of radioactive materials in all surface waters shall not be in concentrations or combinations

that would:

- a. Be harmful to human, animal or aquatic life or the most sensitive designated use;
 - b. Result in radio nuclides in aquatic life exceeding the recommended limits for consumption by humans; or
 - c. Exceed limits specified in EPA's national drinking water regulations or Env-Ws 300 whichever are more stringent; and
- (3) Tainting substances shall not be present in concentrations that individually or in combination are detectable by taste and odor tests performed on the edible portions of aquatic organisms.

Source. #7151, eff 12-10-99

Env-Ws 1703.04 Class-Specific Criteria. In addition to the general water quality criteria specified in Env-Ws 1703.03, the class criteria specified in Env-Ws 1703.05 through Env-Ws 1703.32 shall apply to all surface waters. The surface waters in each classification shall satisfy all the provisions of the lower classifications.

Source. #7151, eff 12-10-99

Env-Ws 1703.05 Combined Sewer Overflows.

(a) To demonstrate that the class B criteria cannot reasonably be met in surface waters as a result of the combined sewer overflows, the applicant shall conduct and submit to the department, a use attainability analysis (UAA) in accord with 40 CFR Part 131.

(b) If, after public notice and comment, the department determines, based on the information provided in (a) above, that the UAA supports the establishment of less stringent criteria, it shall recommend a change in the classification of the waterbody to the legislature.

(c) Exceedances of class B criteria and uses shall be limited to those identified in the Combined Sewer Overflow Facilities Plan after full implementation of the control measures.

Source. #7151, eff 12-10-99

Env-Ws 1703.06 Bacteria.

(a) Uses and criteria associated with bacteria shall be as set forth in RSA 485-A:8, I, II, and V.

(b) Subject to (c) below, the bacteria criteria shall be applied at the end of a wastewater treatment facility's discharge pipe.

(c) For combined sewer overflows which discharge into non-tidal waters, a bacteria criteria of 1000 *Escherichia coli* per 100 milliliters shall be applied at the end of the combined sewer overflow's discharge pipe.

Source. #7151, eff 12-10-99

Env-Ws 1703.07 Dissolved Oxygen.

(a) Class A waters shall have a dissolved oxygen content of at least 75% saturation, based on a daily average, and an instantaneous minimum of at least 6 mg/l at any place or time except as naturally occurs.

(b) Except as naturally occurs, or in waters identified in RSA 485-A:8, III, or subject to (c) below, class B waters shall have a dissolved oxygen content of at least 75% of saturation, based on a daily average, and an instantaneous minimum dissolved oxygen concentration of at least 5 mg/l.

(c) For the period from October 1st to May 14th, in areas identified by the fish and game department as cold water fish spawning areas of species whose early life stages are not directly exposed to the water, the 7 day mean dissolved oxygen concentration shall be at least 9.5 mg/l and the instantaneous minimum dissolved oxygen concentration shall be at least 8 mg/l. This period shall be extended to June 30 for a particular waterbody if the fish and game department determines it is necessary to protect spring spawners and late hatches of fall spawners.

(d) Unless naturally occurring or subject to (a) above, surface waters within the top 25 percent of depth of thermally unstratified lakes, ponds, impoundments and reservoirs or within the epilimnion shall contain a dissolved oxygen content of at least 75 percent saturation, based on a daily average and an instantaneous minimum dissolved oxygen content of at least 5 mg/l. Unless naturally occurring, the dissolved oxygen content below those depths shall be consistent with that necessary to maintain and protect existing and designated uses.

Source. #7151, eff 12-10-99

Env-Ws 1703.08 Benthic Deposits.

(a) Class A waters shall contain no benthic deposits, unless naturally occurring.

(b) Class B waters shall contain no benthic deposits that have a detrimental impact on the benthic community, unless naturally occurring.

Source. #7151, eff 12-10-99

Env-Ws 1703.09 Oil and Grease.

(a) Class A waters shall contain no oil or grease, unless naturally occurring.

(b) Class B waters shall contain no oil or grease in such concentrations that would impair any existing or designated uses.

Source. #7151, eff 12-10-99

Env-Ws 1703.10 Color.

(a) Class A waters shall contain no color, unless naturally occurring.

(b) Class B waters shall contain no color in such concentrations that would impair any existing or designated uses, unless naturally occurring.

Source. #7151, eff 12-10-99

Env-Ws 1703.11 Turbidity.

(a) Class A waters shall contain no turbidity, unless naturally occurring.

(b) Class B waters shall not exceed naturally occurring conditions by more than 10 NTUs.

(c) Waters identified in RSA 485-A:8, III shall contain no turbidity of unreasonable kind or quality.

Source. #7151, eff 12-10-99

Env-Ws 1703.12 Slicks, Odors, and Surface Floating Solids.

(a) Class A waters shall contain no slicks, odors, or surface floating solids unless naturally occurring.

(b) Class B waters shall contain no slicks, odors, or surface floating solids that would impair any existing or designated use, unless naturally occurring.

(c) Waters identified in RSA 485-A:8, III shall be free from slick, odors, and surface floating solids of unreasonable kind or quantity.

Source. #7151, eff 12-10-99

Env-Ws 1703.13 Temperature.

(a) There shall be no change in temperature in class A waters, unless naturally occurring.

(b) Temperature in class B waters shall be in accordance with RSA 485-A:8, II, and VIII.

Source. #7151, eff 12-10-99

Env-Ws 1703.14 Nutrients.

(a) Class A waters shall contain no phosphorus or nitrogen unless naturally occurring.

(b) Class B waters shall contain no phosphorus or nitrogen in such concentrations that would impair any existing or designated uses, unless naturally occurring.

(c) Existing discharges containing either phosphorus or nitrogen which encourage cultural eutrophication shall be treated to remove phosphorus or nitrogen to ensure attainment and maintenance of water quality standards.

(d) There shall be no new or increased discharge of phosphorus into lakes or ponds.

(e) There shall be no new or increased discharge(s) containing phosphorus or nitrogen to tributaries of lakes or ponds that would contribute to cultural eutrophication or growth of weeds or algae in such lakes and ponds.

Source. #7151, eff 12-10-99

Env-Ws 1703.15 Gross Beta Radioactivity. Class A and B waters shall not contain gross beta radioactivity in excess of 1000 picocuries per liter.

Source. #7151, eff 12-10-99

Env-Ws 1703.16 Strontium-90. Class A and B waters shall not contain strontium-90 in excess of 10 picocuries per liter.

Source. #7151, eff 12-10-99

Env-Ws 1703.17 Radium-226. Class A and B waters shall contain no radium-226 in excess of 3 picocuries per liter.

Source. #7151, eff 12-10-99

Env-Ws 1703.18 pH.

- (a) The pH of Class A waters shall be as naturally occurs.
- (b) The pH of Class B waters shall be 6.5 to 8.0, unless due to natural causes.
- (c) The pH of waters identified in RSA 485-A:8, III shall be 6.0 to 9.0, unless due to natural causes.

Source. #7151, eff 12-10-99

Env-Ws 1703.19 Biological and Aquatic Community Integrity.

(a) The surface waters shall support and maintain a balanced, integrated, and adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of similar natural habitats of a region.

(b) Differences from naturally occurring conditions shall be limited to non-detrimental differences in community structure and function.

Source. #7151, eff 12-10-99

Env-Ws 1703.20 Human Health Criteria for Toxic Substances.

(a) The department shall use a risk factor of one in one million when determining human health criteria for all new discharges. The department shall also use a one in one million risk factor in determining human health criteria for all existing discharges unless it can be demonstrated by the applicant that the criteria obtained using the one in one million risk factor cannot be achieved because it is either technologically impossible or economically unfeasible. However, in no case shall the department allow a risk factor greater than one in one hundred thousand.

(b) For the protection of human health, class A and B waters shall not contain dioxin (2, 3, 7, 8 - TCDD) in excess of 0.001 ng/l, unless allowed under part Env-Ws 1707.

Source. #7151, eff 12-10-99

Env-Ws 1703.21 Water Quality Criteria for Toxic Substances.

(a) Unless naturally occurring or allowed under part Env-Ws 1707, all surface waters shall be free from toxic substances or chemical constituents in concentrations or combinations that:

- (1) Injure or are inimical to plants, animals, humans or aquatic life; or
- (2) Persist in the environment or accumulate in aquatic organisms to levels that result in harmful concentrations in edible portions of fish, shellfish, other aquatic life, or wildlife which might consume aquatic life.

(b) Unless allowed in part Env-Ws 1707 or naturally occurring, concentrations of toxic substances in all surface waters shall not exceed the recommended safe exposure levels of the most sensitive surface water use shown in Table 1703.1, subject to the notes as explained in Env-Ws 1703.22, as follows:

TABLE 1703.1

WATER QUALITY CRITERIA FOR TOXIC SUBSTANCES

<u>Chemical</u>	<u>Protection of Aquatic Life</u>				<u>Protection of Human Health</u>	
	<u>Concentration in ug/l</u>				<u>Units per Liter</u>	
	<u>Fresh Acute Criteria</u>	<u>Fresh Chronic Criteria</u>	<u>Marine Acute Criteria</u>	<u>Marine Chronic Criteria</u>	<u>Water & Fish Ingestion</u>	<u>Fish Consumption Only</u>
Acenaphthene	1,700	520	970	710	20ug ^j	20ug ^j
Acrolein	68	21	55	--	320ug	780ug
Acrylonitrile	7,550	2,600	--	--	0.059ug ^c	0.66ug ^c
Aldrin	3.0 ^k	--	1.3 ^k	--	0.13ng ^c	0.14ng ^c
Alkalinity	--	20,000	--	--	--	--
Aluminum	750	87	--	--	--	--
Ammonia ^a					--	--
Aniline	28	14	77	37	--	--
Anthracene	(see Polynuclear Aromatic Hydrocarbons)				9,600ug	110,000ug
Antimony	9,000	1,600	--	--	14ug ^l	4300ug
Arsenic	340 ^{d,i}	150 ^{d,i}	69 ^{d,i}	36 ^{d,i}	18ng ^{b,c}	140ng ^{b,c}
Asbestos	--	--	--	--	7,000,000 fibres ^c	--
Barium	--	--	--	--	1.0mg ^l	--
Benzene	5,300	--	5,100	700	1.2ug ^c	71ug ^c
Benzidine	2,500	--	--	--	0.12ng ^c	0.54ng ^c
Benzo(a) Anthracene	(see Polynuclear Aromatic Hydrocarbons)				0.0044ug ^c	0.049ug ^c
Benzo(a) Pyrene	(see Polynuclear Aromatic Hydrocarbons)				0.0044ug ^c	0.049ug ^c
Benzo(b) Fluoranthene	(see Polynuclear Aromatic Hydrocarbons)				0.0044ug ^c	0.049ug ^c
Benzo(g,h,i) Perylene	(see Polynuclear Aromatic Hydrocarbons)				--	--
Benzo(k) Fluoranthene	(see Polynuclear Aromatic Hydrocarbons)				0.0044ug ^c	0.049ug ^c
Beryllium	130	5.3	--	--	1	--
BHC	100 ^e	--	0.34 ^e	--	(see individual compounds)	
alpha-BHC	(see BHC)				3.9ng ^c	13ng ^c

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<u>Chemical</u>	<u>Fresh Acute Criteria</u>	<u>Fresh Chronic Criteria</u>	<u>Marine Acute Criteria</u>	<u>Marine Chronic Criteria</u>	<u>Water & Fish Ingestion</u>	<u>Fish Consumption Only</u>
beta-BHC	(see BHC)				14ng ^c	46ng ^c
delta-BHC	(see BHC)				0.0123ug	0.0414ug
gamma-BHC(Lindane)	0.95	.08	.16 ^k	--	19ng ^c	63ng ^c
technical-BHC	--	--	--	--	0.0123 ug	0.0414 ug
Bis (2-Chloroethyl) Ether	(see Chloroalkyl ethers)				0.031 ^c	1.4 ^c
Bis (2-Ethylhexy)Phthalate	(see Phthalate esters)				1.8ug ^c	5.9ug ^c
Bromoform	(see Halomethanes)				4.3ug ^c	360ug ^c
4-Bromophenyl phenyl ether	(see Haloethers)				--	--
Butyl benzyl phthalate	(see Phthalate esters)				3000ug	5200ug
Cadmium ⁱ	0.95 ^{f,d}	0.80 ^{f,d}	42 ^d	9.3 ^d	--	--
Carbon Tetrachloride	35,200	--	50,000	--	0.25ug ^c	4.4ug ^c
Chlordane	2.4 ^k	0.0043 ^k	0.09 ^k	0.004 ^k	2.1ng ^c	2.2ng ^c
Chlorinated benzenes	250 ^e	50 ^e	160 ^e	129 ^e	(see individual compounds)	
Chlorobenzene		(See Chlorinated benzenes)			20ug ^j	20ug ^j
Chlorides	860,000	230,000	--	--	--	--
Chlorinated napthalenes	1,600 ^e	--	7.5 ^e	--	(see individual compounds)	
Chlorine	19	11	13	7.5	1	--
Chloroalkyl ethers	238,000 ^e	--	--	--	(see individual compounds)	
Chloroethyl ether (Bis-2)	(see Chloroalkyl ethers)				.031ug ^c	1.4ug ^c
Chloroethyl vinyl ether-2	(see Chloroalkyl ethers)				--	--
Chlorodibromomethane	(see Halomethanes)				0.41ug ^c	34ug ^c
Chloroethoxy methane (Bis-2)	(see Chloroalkyl ethers)				--	--
Chloroform	28,900	1,240	(see Halomethanes)		5.7ug ^c	470ug ^c
Chloroisopropyl ether (Bis-2)	(see Chloroalkyl ethers)				1,400ug	170,000ug
p-Chloro-m-cresol	30	--	--	--	3,000ug ^j	3,000ug ^j
Chloromethyl ether (Bis)	(see Chloroalkyl ethers)				0.13ng ^c	0.78ng ^c
Chloronaphthalene 2	(see Chlorinated naphthalenes)				1,700ug	4,300ug

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<u>Chemical</u>	<u>Fresh Acute Criteria</u>	<u>Fresh Chronic Criteria</u>	<u>Marine Acute Criteria</u>	<u>Marine Chronic Criteria</u>	<u>Water & Fish Ingestion</u>	<u>Fish Consumption Only</u>
Chlorophenol 2	4,380	2,000	--	--	0.1ug ^j	0.1ug ^j
Chlorophenol 3	--	--	--	--	0.1ug ^j	0.1ug ^j
Chlorophenol 4	--	--	29,700	--	0.1ug ^j	0.1ug ^j
Chlorophenoxy herbicides (2,4,5-TP)		--	--	--	10ug	--
Chlorophenoxy herbicides (2,4-D)--		--	--	--	100ug ^l	--
Chlorophenyl phenyl ether 4		(see Haloethers)			--	--
Chlorpyrifos	0.083	0.041	0.011	0.0056	--	--
Chloro-4 Methyl-3 Phenol	30	--	--	--	3,000ug ^j	3,000ug ^j
Chromium +6	16 ^{d,i}	11 ^{d,i}	1,100 ^{d,i}	50 ^{d,i}	1	--
Chromium+3	183 ^{f,d,i}	24 ^{f,d,i}	10,300	--	--	--
Chrysene	(see Polynuclear Aromatic Hydrocarbons)				0.0044ug ^c	0.049ug ^c
Copper ⁱ	3.6 ^{f,d}	2.7 ^{f,d}	4.8 ^d	3.1 ^d	1,000ug ^j	1,000ug ^j
Cyanide	22 ^m	5.2 ^m	1.0 ^m	1.0 ^m	700ug ^l	220,000ug
DDE(4,4')	1,050	--	14	--	0.59ng ^c	0.59ng ^c
DDD(4,4')	0.06	--	3.6	--	0.83ng ^c	0.84ng ^c
DDT(4,4')	1.1 ^k	0.001 ^k	0.13 ^k	0.001 ^k	0.59ng ^c	0.59ng ^c
Demeton	--	0.1	--	0.1	--	--
Dibenzo(a,h)Anthracene	(see Polynuclear Aromatic Hydrocarbons)				0.0044ug ^c	0.049ug ^c
Dibutyl Phthalate	(see Phthalate esters)				2.7mg	12mg
Dichlorobenzenes	1,120 ^e	763 ^e	1,970 ^e	--	(see individual compounds)	
Dichlorobenzene(1,2)	(see Dichlorobenzenes)				2,700ug ^l	17,000ug
Dichlorobenzene(1,3)	(see Dichlorobenzenes)				400ug	2600ug
Dichlorobenzene(1,4)	(see Dichlorobenzenes)				400ug ^l	2600ug
Dichlorobenzidine(3,3')	--	--	--	--	0.04ug ^c	0.077ug ^c
Dichlorobromomethane	(see Halomethanes)				0.56ug ^c	46ug ^c
Dichlorodifluoromethane	(see Halomethanes)				6.9mg ^c	570mg ^c
Dichloroethane(1,2)	118,000	20,000	113,000	--	0.38ug ^c	99ug ^c

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<u>Chemical</u>	<u>Fresh Acute Criteria</u>	<u>Fresh Chronic Criteria</u>	<u>Marine Acute Criteria</u>	<u>Marine Chronic Criteria</u>	<u>Water & Fish Ingestion</u>	<u>Fish Consumption Only</u>
Dichloroethylenes	11,600 ^e	--	224,000 ^e	--	(see individual compounds)	
Dichloroethylene(1,1)	(see Dichloroethylenes)				0.057ug ^c	3.2ug ^c
Dichloroethylene(1,2-Trans)	(see Dichloroethylenes)				700ug ^l	140,000ug
Dichlorophenol(2,3)	--	--	--	--	0.04ug ^j	0.04ug ^j
Dichlorophenol(2,4)	2,020	365	--	--	93ug	790ug
Dichlorophenol(2,5)	--	--	--	--	0.5ug ^j	0.5ug ^j
Dichlorophenol(2,6)	--	--	--	--	0.2ug ^j	0.2ug ^j
Dichlorophenol(3,4)	--	--	--	--	0.3ug ^j	0.3ug ^j
Dichloropropanes	23,000 ^e	5,700 ^e	10,300 ^e	3,040 ^e	(see individual compounds)	
Dichloropropane(1,2)	(see Dichloropropanes)				0.52ug ^c	39ug ^c
Dichloropropenes	6,060 ^e	244 ^e	790 ^e	--	(see individual compounds)	
Dichloropropene(1,3)	(see Dichloropropenes)				10 ug	1700 ug
Dieldrin	0.24	0.056	0.71 ^k	0.0019 ^k	0.14ng ^c	0.14ng ^c
Diethyl Phthalate	--	--	--	--	23mg	120mg
Dimethyl Phenol(2,4)	1,300	530	270	110	400ug ^j	400ug ^j
Dimethyl Phthalate	(see Phthalate esters)				313mg	2.9g
Di-n-butyl Phthalate	(see Phthalate esters)				2.7mg	12mg
Dinitrotoluenes	330 ^e	230 ^e	590 ^e	370 ^e	(see individual compounds)	
Dinitrotoluene(2,4)	(see Dinitrotoluenes)				0.11ug ^c	9.1ug ^c
Dinitrotoluene(2,6)	(see Dinitrotoluenes)				--	--
Dinitro-o-cresol (2,4)	(see Nitrophenols)				13.4ug	765ug
Dinitro-o-cresol (4,6)	(see Nitrophenols)				13.4ug	765ug
Dinitrophenols	(see Nitrophenols)				70ug	14,000ug
Dinitrophenol(2,4)	(see Nitrophenols)				70ug	14,000ug
Di-n-octyl phthalate	(see Phthalate esters)				--	--
Diphenylhydrazine(1,2)	270	--	--	--	0.04ug ^c	0.54ug ^c
	Fresh	Fresh	Marine	Marine	Water	Fish

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<u>Chemical</u>	<u>Acute Criteria</u>	<u>Chronic Criteria</u>	<u>Acute Criteria</u>	<u>Chronic Criteria</u>	<u>& Fish Ingestion</u>	<u>Consumption Only</u>
Di-2-ethylhexyl phthalate	(see Phthalate esters)				1.8ug ^c	5.9ug ^c
alpha-Endosulfan	0.22 ^k	0.056 ^k	0.034 ^k	0.0087 ^k	110ug	240ug
beta-Endosulfan	0.22 ^k	0.056 ^k	0.034 ^k	0.0087 ^k	110ug	240ug
Endosulfan Sulfate	--	--	--	--	110ug	240ug
Endrin	0.086	0.036	0.037 ^k	0.0023 ^k	0.76ug	0.81ug
Endrin Aldehyde	--	--	--	--	0.76ug	0.81ug
Ethylbenzene	32,000	--	430	--	3,100ug ^l	29,000ug
Fluorene	(see Polynuclear Aromatic Hydrocarbons)				1,300ug	14,000ug
Guthion	--	0.01	--	0.01	--	--
Haloethers	360 ^e	122 ^e	--	--	(see individual compounds)	
Halomethanes	11,000 ^e	--	12,000 ^e	6,400 ^e	(see individual compounds)	
Heptachlor	0.52 ^k	0.0038 ^k	0.053 ^k	0.0036 ^k	0.21ng ^c	0.21ng ^c
Heptachlor Epoxide	0.52 ^k	0.0038 ^k	0.053 ^k	0.0036 ^k	0.10ng ^c	0.11ng ^c
Hexachloroethane	980	540	940	--	1.9ug ^c	8.9ug ^c
Hexachlorobenzene	(see Chlorinated benzenes)				0.75ng ^c	0.77ng ^c
Hexachlorobutadiene	90	9.3	32	--	0.44ug ^c	50ug ^c
Hexachlorocyclo-hexane-(Technical)	(see BHC)				0.0123ug	0.0414ug
Hexachlorocyclopentadiene	7.0	5.2	7.0	--	1.0 ^j	1.0 ^j
Ideno(1,2,3-cd)Pyrene	(see Polynuclear Aromatic Hydrocarbons)				0.0044ug ^c	0.049ug ^c
Iron	--	1,000	--	--	0.3mg	--
Isophorone	117,000	--	12,900	--	36ug ^c	2,600ug ^c
Lead ⁱ	14 ^{f,d}	0.54 ^{f,d}	210 ^d	8.1 ^d	--	--
Malathion	0.1	0.1		0.1	--	--
Manganese	--	--	--	--	50ug	100ug
Mercury	1.4 ^{d,i,g}	0.77 ^{d,i,g}	1.8 ^{d,i,g}	0.94 ^{d,i,g}	0.05ug	0.051ug
Methoxychlor	--	0.03	--	0.03	100ug ^l	--
	Fresh	Fresh	Marine	Marine	Water	Fish

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<u>Chemical</u>	<u>Acute Criteria</u>	<u>Chronic Criteria</u>	<u>Acute Criteria</u>	<u>Chronic Criteria</u>	<u>& Fish Ingestion</u>	<u>Consumption Only</u>
Methyl Bromide	(see Halomethanes)				48ug	4,000ug
Methyl Chloride	(see Halomethanes)				--	--
Methylene Chloride	(see Halomethanes)				4.7ug ^c	1,600ug ^c
2 Methyl-4,6-Dinitrophenol	(see Nitrophenols)				13.4ug	765ug
2-Methyl-4-chlorophenol	--	--	--	--	1,800ug ^j	1,800ug ^j
3-Methyl-4-chlorophenol	30	--	--	--	3,000ug ^j	3,000ug ^j
3-Methyl-6-chlorophenol	--	--	--	--	20ug ^j	20ug ^j
Mirex	--	0.001	--	0.001	--	--
Naphthalene	2,300	620	2,350	--	--	--
Nickel ⁱ	144.9 ^{f,d}	16.1 ^{f,d}	74 ^d	8.2 ^d	610ug	4,600ug
Nitrates	--	--	--	--	10mg	--
Nitrobenzene	27,000	--	6,680	--	17ug	30ug ^j
Nitrophenols	230 ^e	150 ^e	4,850 ^e	--	(see individual compounds)	
Nitrophenol 2	(see Nitrophenols)				--	--
Nitrophenol 4	(see Nitrophenols)				--	--
Nitrosamines	5,850 ^e	--	3,300,000 ^e	--	0.8ng	1.24ug
Nitrosodibutylamine N	(see Nitrosamines)				6.4ng	587ng
Nitrosodiethylamine N	(see Nitrosamines)				0.8ng	1,240ng
Nitrosodimethylamine N	(see Nitrosamines)				0.69ng ^c	8.1ug ^c
Nitrosodi-n-propylamine N	(see Nitrosamines)				0.005ug ^c	1.4ug ^c
Nitrosodiphenylamine N	(see Nitrosamines)				5.0ug ^c	16ug ^c
Nitrosopyrrolidine N	(see Nitrosamines)				16ng	91,900ng
Parathion	0.065	0.013	--	--	--	--
PCB	2.0 ^e	0.014 ^e	10.0 ^e	0.03 ^e	0.17ng ^{c,n}	0.17ng ^{c,n}
PCB-1242	(see PCB)				(see PCB)	(see PCB)
PCB-1254	(see PCB)				(see PCB)	(see PCB)
	Fresh Acute	Fresh Chronic	Marine Acute	Marine Chronic	Water & Fish	Fish Consumption

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<u>Chemical</u>	<u>Criteria</u>	<u>Criteria</u>	<u>Criteria</u>	<u>Criteria</u>	<u>Ingestion</u>	<u>Only</u>
PCB-1221	(see PCB)				(see PCB)	(see PCB)
PCB-1248	(see PCB)				(see PCB)	(see PCB)
PCB-1260	(see PCB)				(see PCB)	(see PCB)
PCB-1016	(see PCB)				(see PCB)	(see PCB)
Pentachlorinated Ethanes	7,240	1,100	390	281	--	--
Pentachlorobenzene	(see Chlorinated benzenes)				3.5ug	4.1ug
Pentachlorophenol	5.28 ^h	4.05 ^h	13	7.9	0.28ug ^c	8.2ug ^c
Phenanthrene	(see Polynuclear Aromatic Hydrocarbons)					
Phenol	10,200	2,560	5,800	--	300ug ^j	300ug ^j
Phthalate Esters	940 ^e	3 ^e	2,944 ^e	3.4 ^e	--	--
Polychlorinated Biphenyls	(see PCB's)				--	--
Polynuclear Aromatic Hydrocarbons	--	--	300 ^e	--	(see individual compounds)	
Pyrene	(see Polynuclear Aromatic Hydrocarbons)				960ug	11,000ug
Selenium		5	290 ^{d,i}	71 ^{d,i}	170ug ^l	11,000ug
Silver	0.32 ^{f,i,g}	--	1.9 ^{d,i,k}	--	105ug ^p	65mg ^p
Sulfide-Hydrogen Sulfide	--	2.0	--	2.0	--	--
Tetrachlorobenzene 1,2,4,5	(see Chlorinated benzenes)				2.3ug	2.9ug
Tetrachloroethane 1,1,2,2	--	2,400	9,020	--	0.17ug ^c	11ug ^c
		(see Tetrachloroethanes)				
Tetrachloroethanes	9,320 ^e	--	--	--	(see individual compounds)	
Tetrachloroethylene	5,280	840	10,200	450	0.80ug ^c	8.85ug ^c
Tetrachlorophenol 2,3,5,6	--	--	440	--	--	--
Tetrachlorophenol 2,3,4,6	--	--	--	--	1.0ug ^j	1.0ug ^j
Thallium	1,400	40	2,130	--	1.7ug	6.3ug
Toluene	--	--	--	--	6.8mg ^l	200mg
Toxaphene	0.73	0.0002	0.21	0.0002	0.73ng ^c	0.75ng ^c
Tributyltin TBT	0.46	0.063	0.37	0.01	--	--
	Fresh Acute	Fresh Chronic	Marine Acute	Marine Chronic	Water & Fish	Fish Consumption

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<u>Chemical</u>	<u>Criteria</u>	<u>Criteria</u>	<u>Criteria</u>	<u>Criteria</u>	<u>Ingestion</u>	<u>Only</u>
Trichlorinated Ethanes	18,000 ^c	--	--	--	(see individual compounds)	
Trichlorobenzene 1,2,4	(see Chlorinated benzenes)				260ug ^l	940ug
Trichloroethane 1,1,1	--	--	31,200	--	1	--
Trichloroethane 1,1,2	--	9,400	--	--	0.60ug ^c	42ug ^c
Trichloroethylene	45,000	21,900	2,000	--	2.7ug ^c	81ug ^c
Trichlorofluoromethane	(see Halomethanes)				10mg	860mg
Trichlorophenol 2,4,5	--	--	--	--	1.0ug ^j	1.0ug ^j
Trichlorophenol 2,4,6	--	970	--	--	2.0ug ^j	2.0ug ^j
Vinyl Chloride	--	--	--	--	2.0ug ^c	525ug ^c
Zinc ⁱ	36.2 ^{f,d}	36.5 ^{f,d}	90 ^d	81 ^d	5,000ug ^j	5,000ug ^j

Source. #7151, eff 12-10-99

Env-Ws 1703.22 Notes For Table 1703.1. The following shall apply to Table 1703.1:

(a) "a" shall indicate that the freshwater and saltwater aquatic life criteria for ammonia are shown in Env-Ws 1703.25 through Env-Ws 1703.31.

(b) "b" shall indicate that the criteria refers to the inorganic form only.

(c) "c" shall indicate that these criteria for the protection of human health are based on carcinogenicity. The human health criteria without this footnote are based on systemic toxicity.

(d) "d" shall indicate that criteria for these metals are expressed as a function of the water effect ratio (WER) as defined in 40 CFR 131.36(c). The values displayed in Table 1703.1 correspond to a WER of 1.0. To determine metals criteria for different WER's, the procedures described in the EPA publication "Interim Guidance on Determination and Use of Water-Effect Ratios for Metals" (EPA-823-B-94-001) shall be used.

(e) "e" shall indicate that the following classes of compounds have 2 or more isomers and the sum of the concentrations of each isomer shall meet the appropriate aquatic life criteria:

- (1) BHC;
- (2) Chlorinated benzenes;
- (3) Chlorinated naphthalenes;
- (4) Chloroalkyl ethers;
- (5) Dichlorobenzenes;
- (6) Dichloroethylenes;
- (7) Dichloropropanes;

- (8) Dichloropropenes;
- (9) Dinitrotoluenes;
- (10) Haloethers;
- (11) Halomethanes;
- (12) Nitrophenols;
- (13) Nitrosamines;
- (14) PCB;
- (15) Phthalate esters;
- (16) Polynuclear aromatic hydrocarbons;
- (17) Tetrachloroethanes; and
- (18) Trichlorinated ethanes.

(f) "f" shall indicate that the freshwater aquatic criteria for these metals are expressed as a function of the total hardness, as mg/l CaCO_3 of the surface water. The values displayed in Table 1703.1 correspond to a total hardness of 25 mg/l. To calculate aquatic life criteria for other hardness values between 25 mg/l and 400mg/l, expressed as calcium carbonate, the equations shown in Env-Ws 1703.24 shall be used. For hardness less than 25 mg/l, a hardness of 25 mg/l shall be used in the equations. For hardness values greater than 400 mg/l, a hardness of 400 mg/l shall be used in the equations.

(g) "g" shall indicate that, if the fresh or marine chronic criteria for total mercury exceeds 0.77 ug/l more than once in a 3-year period in the ambient water, the edible portion of aquatic species of concern shall be analyzed to determine whether the concentration of methyl mercury exceeds the FDA action level of 1.0 mg/kg.

(h) "h" shall indicate that the freshwater aquatic life criteria for pentachlorophenol are expressed as a function of pH. Values displayed in Table 1703.1 correspond to a pH value of 6.5. For other pH values, the formulas shown in Env-Ws 1703.32 shall be used.

(i) "i" shall indicate that the values presented for aquatic life protection are dissolved metals and were based on values shown in Tables 1703.2 and 1703.3. To calculate dissolved criteria for hardness dependent metals at hardness(s) greater than 25 mg/l, Table 1703.3 shall be used to calculate the total recoverable metal and Table 1703.2 shall be used to convert the total recoverable metal to a dissolved metal.

(j) "j" shall indicate that these human health criteria prevent taste and odor effects in fish and other aquatic life as prohibited in Env-Ws 1703.03(c)(3).

(k) "k" shall indicate that these criteria are based on EPA's 304(a) criteria in the 1980 documents listed below and were derived to be used as instantaneous maximum values, or to be applied after division by 2, to obtain a value comparable to an acute criterion derived using the 1985 Guidelines, when assessment is done using an averaging period:

- (1) Aldrin/Dieldrin, document number 440/5-80-019;
- (2) Chlordane, document number 440/5-80-027;
- (3) DDT, document number 440/5-80-038;

- (4) Endosulfan, document number 440/5-80-046;
- (5) Endrin, document number 440/5-80-047;
- (6) Heptachlor, document number 440/5-80-052;
- (7) Hexachlorocyclohexane, document number 440/5-80-054; or
- (8) Silver, document number 440/5-80-071.

(l) "1" shall indicate that a more stringent drinking water maximum contaminant level (MCL) has been issued by EPA.

(m) "m" shall indicate that this criteria is expressed as micrograms of free cyanide per liter.

(n) "n" shall indicate that this criteria applies to total PCBs or the sum of all of its congener or isomer analyses.

(o) "o" shall indicate that the freshwater acute criteria for selenium shall be calculated using the values for the fraction f_1 of selenite and f_2 of selenate measured in the receiving water. To calculate the acute criteria, in ug/l, the number 1 shall be divided by the sum of the fractions f_1 divided by 185.9 and f_2 divided by 12.83, as follows:

$$Acute\ Criteria = \frac{1}{\frac{f_1}{185.9} + \frac{f_2}{12.83}}$$

(p) "p" shall indicate that these human health criteria for silver shall be for the protection of humans from argyria.

Source. #7151, eff 12-10-99

Env-Ws 1703.23 Conversion Factors For Metals.

(a) Table 1703.2 shall be used when converting total recoverable metals to dissolved metals. These factors shall also be used as translators to go from dissolved metals criteria in Table 1703.1 to permit limits expressed as total recoverable metals. If the hardness of the receiving water is different than 25 mg/l, then Table 1703.2 shall also be used to calculate the total recoverable metal.

(b) Table 1703.2 shall be as follows:

TABLE 1703.2
Factors to Convert Total Recoverable Metals to Dissolved Metals

	FRESHWATER Conversion Factors		MARINE Conversion Factors
	Acute	Chronic	Acute & Chronic
Arsenic	1.0	1.0	1.0
Cadmium	$1.136672 - [(\text{Ln Hardness})(0.041838)]$	$1.101672 - [(\text{Ln Hardness})(0.041838)]$	0.994
Chromium (+3)	0.316	0.860	-
Chromium (+6)	0.982	0.962	0.993
Copper	0.960	0.960	0.83
Lead	$1.46203 - [(\text{Ln Hardness})(0.145712)]$	$1.46203 - [(\text{Ln Hardness})(0.145712)]$	0.951
Mercury	0.85	0.85	0.85
Nickel	0.998	0.997	0.990
Selenium	0.922	0.922	0.998
Silver	0.85	-	0.85
Zinc	0.978	0.986	0.946

Source. #7151, eff 12-10-99

Env-Ws 1703.24 Freshwater Aquatic Life Criteria For Metals.

(a) To calculate freshwater aquatic life criteria for metals, the values shown in Table 1703.3 shall be used.

TABLE 1703.3
Aquatic Life Criteria for Metals

	m_a	b_a	m_c	b_c
Cadmium	1.128	-3.6867	0.7852	-2.715
Copper	0.9422	-1.700	0.8545	-1.702
Chromium+3	0.8190	3.7256	0.8190	.6848
Lead	1.273	-1.460	1.273	-4.705

	m_a	b_a	m_c	b_c
Nickel	0.8460	2.255	0.8460	0.0584
Silver	1.72	-6.52	-----	-----
Zinc	0.8473	0.884	0.8473	0.884

(b) To calculate the acute criteria, in ug/l, for the metals shown Table 1703.3, the exponent "e" shall be raised to the power "x" where "x" is equal to the parenthetical expression " m_a " multiplied by the natural logarithm of the hardness and to which quotient the value " b_a " shall be added, as follows:

$$\text{Acute Criteria} = e^x \text{ where} \\ x = (m_a [\ln (\text{hardness})] + b_a)$$

(c) To calculate the chronic criteria, in ug/l, for the metals shown in Table 1703.3, the exponent "e" shall be raised to the power "x" where "x" is equal to the parenthetical expression " m_c " multiplied by the natural logarithm of the hardness and to which quotient the value " b_c " shall be added, as follows:

$$\text{Chronic Criteria} = e^x \text{ where} \\ x = (m_c [\ln (\text{hardness})] + b_c)$$

Source. #7151, eff 12-10-99

Env-Ws 1703.25 Freshwater Aquatic Life Criteria For Ammonia.

(a) Subject to (b) below, Table 1703.4 shall be used to calculate freshwater aquatic life criteria, in milligrams of nitrogen per liter, for ammonia.

(b) During the period from November 1 through May 31, the values of the freshwater aquatic life chronic criteria for ammonia shall be those shown in Table 1703.4 unless the department, after reviewing all technical and scientifically valid information, determines that:

- (1) No sensitive life stages of any fish species are ordinarily present in numbers affecting the sustainability of populations in the specific surface water during this time period; or
- (2) The specific surface water can fully support beneficial fisheries uses under different cold season ammonia concentration regimes.

(c) The revised criteria derived in accordance with Env-Ws 1703.25(b)(1) shall not exceed 3 times the appropriate value shown in Table 1703.4.

(d) The department shall use the May 1996 guidance "Biological Criteria, Technical Guidance for Streams and Small Rivers" (EPA 822-B-96-001) to determine the adequacy of the instream biological monitoring information.

(e) If the acute criteria obtained from Table 1703.4 is greater than 0.5 times the species mean acute value for a listed threatened or endangered species, or for a surrogate for such species, then the acute criteria shall be reset equal to 0.5 times the species mean acute value for that species or surrogate.

(f) If the chronic criteria obtained from Table 1703.4 is greater than the species mean chronic value of a listed threatened or endangered species, or for a surrogate for such species, then the chronic criteria shall be reset to the species mean chronic value for that species or surrogate.

TABLE 1703.4

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Freshwater Aquatic Life Criteria For Ammonia

pH	Acute Criteria (Salmonids present)	Acute Criteria (Salmonids absent)	Chronic Criteria
6.0	36.7	55.0	3.63
6.1	36.2	54.2	3.61
6.2	35.5	53.2	3.59
6.3	34.7	52.0	3.56
6.4	33.7	50.5	3.52
6.5	32.6	48.8	3.48
6.6	31.3	46.8	3.42
6.7	29.8	44.6	3.36
6.8	28.1	42.0	3.28
6.9	26.2	39.1	3.19
7.0	24.1	36.1	3.08
7.1	22.0	32.8	2.96
7.2	19.7	29.5	2.81
7.3	17.5	26.2	2.65
7.4	15.4	23.0	2.47
7.5	13.3	19.9	2.28
7.6	11.4	17.0	2.07
7.7	9.65	14.4	1.87
7.8	8.11	12.1	1.66
7.9	6.77	10.1	1.46
8.0	5.62	8.40	1.27
8.1	4.64	6.95	1.09
8.2	3.83	5.72	0.935
8.3	3.15	4.71	0.795

TABLE 1703.4 (Continued)
Freshwater Aquatic Life Criteria for Ammonia

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pH	Acute Criteria (Salmonids Present)	Acute Criteria Salmonids Absent)	Chronic Criteria
8.4	2.59	3.88	0.673
8.5	2.14	3.20	0.568
8.6	1.77	2.65	0.480
8.7	1.47	2.20	0.406
8.8	1.23	1.84	0.345
8.9	1.04	1.56	0.295
9.0	0.885	1.32	0.254

Source. #7151, eff 12-10-99

Env-Ws 1703.26 Saltwater Acute Aquatic Life Criteria for Ammonia at a Salinity of 10 g/kg. To calculate aquatic life acute saltwater criteria for ammonia, in mg of nh_3 per liter, for a salinity of 10 g/kg, the values shown in Table 1703.5 shall be used.

TABLE 1703.5
Acute Saltwater Aquatic Life Criteria (Salinity of 10 g/kg)

pH	TEMPERATURE (C)							
	0	5	10	15	20	25	30	35
7.0	270	191	131	92	62	44	29	21
7.2	175	121	83	58	40	27	19	13
7.4	110	77	52	35	25	17	12	8.3
7.6	69	48	33	23	16	11	7.7	5.6
7.8	44	31	21	15	10	7.1	5.0	3.5
8.0	27	19	13	9.4	6.4	4.6	3.1	2.3
8.2	18	12	8.5	5.8	4.2	2.9	2.1	1.5
8.4	11	7.9	5.4	3.7	2.7	1.9	1.4	1.0
8.6	7.3	5.0	3.5	2.5	1.8	1.3	0.98	0.75
8.8	4.6	3.3	2.3	1.7	1.2	0.92	0.71	0.56
9.0	2.9	2.1	1.5	1.1	0.85	0.67	0.52	0.44

Source. #7151, eff 12-10-99

Env-Ws 1703.27 Saltwater Acute Aquatic Life Criteria for Ammonia at a Salinity of 20 g/kg. To calculate aquatic life acute saltwater criteria for ammonia, in mg of nh_3 per liter, for a salinity of 20 g/kg, the values shown in

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Table 1703.6 shall be used.

TABLE 1703.6
Acute Saltwater Aquatic Life Criteria (Salinity of 20 g/kg)

pH	TEMPERATURE (C)							
	0	5	10	15	20	25	30	35
7.0	291	200	137	96	64	44	31	21
7.2	183	125	87	60	42	29	20	14
7.4	116	79	54	37	27	18	12	8.7
7.6	73	50	35	23	17	11	7.9	5.6
7.8	46	31	23	15	11	7.5	5.2	3.5
8.0	29	20	14	9.8	6.7	4.8	3.3	2.3
8.2	19	13	8.9	6.2	4.4	3.1	2.1	1.6
8.4	12	8.1	5.6	4.0	2.9	2.0	1.5	1.1
8.6	7.5	5.2	3.7	2.7	1.9	1.4	1.0	0.77
8.8	4.8	3.3	2.5	1.7	1.3	0.94	0.73	0.56
9.0	3.1	2.3	1.6	1.2	0.87	0.69	0.54	0.44

Source. #7151, eff 12-10-99

Env-Ws 1703.28 Saltwater Acute Aquatic Life Criteria for Ammonia at a Salinity of 30 g/kg. To calculate aquatic life acute saltwater criteria for ammonia, in mg of nh_3 per liter, for a salinity of 30 g/kg, the values shown in Table 1703.7 shall be used.

TABLE 1703.7
Acute Saltwater Aquatic Life Criteria (Salinity of 30 g/kg)

pH	TEMPERATURE (C)							
	0	5	10	15	20	25	30	35
7.0	312	208	148	102	71	48	33	23
7.2	196	135	94	64	44	31	21	15
7.4	125	85	58	40	27	19	13	9.4
7.6	79	54	37	25	21	12	8.5	6.0
pH	TEMPERATURE (C)							
7.8	50	33	23	16	11	7.9	5.4	3.7

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8.0	31	21	15	10	7.3	5.0	3.5	2.5
8.2	20	14	9.6	6.7	4.6	3.3	2.3	1.7
8.4	12.7	8.7	6.0	4.2	2.9	2.1	1.6	1.1
8.6	8.1	5.6	4.0	2.7	2.0	1.4	1.1	0.81
8.8	5.2	3.5	2.5	1.8	1.3	1.0	0.75	0.58
9.0	3.3	2.3	1.7	1.2	0.94	0.71	0.56	0.46

Source. #7151, eff 12-10-99

Env-Ws 1703.29 Saltwater Chronic Aquatic Life Criteria for Ammonia at a Salinity of 10 g/kg. To calculate aquatic life chronic saltwater criteria, in mg of nh_3 per liter, for ammonia, for a salinity of 10 g/kg, the values shown in Tables 1703.8 shall be used.

TABLE 1730.8
Chronic Saltwater Aquatic Life Criteria (Salinity of 10 g/kg)

pH	TEMPERATURE (C)							
	0	5	10	15	20	25	30	35
7.0	41	29	20	14	9.4	6.6	4.4	3.1
7.2	26	18	12	8.7	5.9	4.1	2.8	2.0
7.4	17	12	7.8	5.3	3.7	2.6	1.8	1.2
7.6	10	7.2	5.0	3.4	2.4	1.7	1.2	0.84
7.8	6.6	4.7	3.1	2.2	1.5	1.1	0.75	0.53
8.0	4.1	2.9	2.0	1.40	0.97	0.69	0.47	0.34
8.2	2.7	1.8	1.3	0.87	0.62	0.44	0.31	0.23
8.4	1.7	1.2	0.81	0.56	0.41	0.29	0.21	0.16
8.6	1.1	0.75	0.53	0.37	0.27	0.20	0.15	0.11
8.8	0.69	0.50	0.34	0.25	0.18	0.14	0.11	0.08
9.0	0.44	0.31	0.23	0.17	0.13	0.10	0.08	0.07

Source. #7151, eff 12-10-99

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Env-Ws 1703.30 Saltwater Chronic Aquatic Life Criteria for Ammonia at a Salinity of 20 g/kg. To calculate aquatic life chronic saltwater criteria, in mg of nh_3 per liter, for ammonia, for a salinity of 20 g/kg, the values shown in Table 1703.9 shall be used.

TABLE 1703.9
Chronic Saltwater Aquatic Life Criteria (Salinity of 20 g/kg)

pH	TEMPERATURE (C)							
	0	5	10	15	20	25	30	35
7.0	44	30	21	14	9.7	6.6	4.7	3.1
7.2	27	19	13	9.0	6.2	4.4	3.0	2.1
7.4	18	12	8.1	5.6	4.1	2.7	1.9	1.3
7.6	11	7.5	5.3	3.4	2.5	1.7	1.2	0.84
7.8	6.9	4.7	3.4	2.3	1.6	1.1	0.78	0.53
8.0	4.4	3.0	2.1	1.5	1.0	0.72	0.50	0.34
8.2	2.8	1.9	1.3	.94	.66	.47	.31	.24
8.4	1.8	1.2	.84	.59	.44	.30	.22	.16
8.6	1.1	.78	.56	.41	.28	.20	.15	.12
8.8	.72	.50	.37	.26	.19	.14	.11	.08
9.0	.47	.34	.24	.18	.13	.10	.08	.07

Source. #7151, eff 12-10-99

Env-Ws 1703.31 Saltwater Chronic Aquatic Life Criteria for Ammonia at a Salinity of 30g/kg. To calculate aquatic life chronic saltwater criteria, in mg of nh_3 per liter, for ammonia, for a salinity of 30 g/kg, the values shown in Table 1703.10 shall be used.

TABLE 1703.10
Chronic Saltwater Aquatic Life Criteria (Salinity of 30 g/kg)

pH	TEMPERATURE (C)							
	0	5	10	15	20	25	30	35
7.0	47	31	22	15	11	7.2	5.0	3.4
7.2	29	20	14	9.7	6.6	4.7	3.1	2.2
7.4	19	13	8.7	5.9	4.1	2.9	2.0	1.4
7.6	12	8.1	5.6	3.7	3.1	1.8	1.3	0.90

TABLE 1703.10 Continued
Chronic Saltwater Aquatic Life Criteria (Salinity of 30 g/kg)

pH	TEMPERATURE (C)							
7.8	7.5	5.0	3.4	2.4	1.7	1.2	0.81	0.56
8.0	4.7	3.1	2.2	1.6	1.1	0.75	0.53	0.37
8.2	3.0	2.1	1.4	1.0	0.69	0.50	0.34	0.25
8.4	1.9	1.3	0.90	0.62	0.44	0.31	0.23	0.17
8.6	1.2	0.84	0.59	0.41	0.30	0.22	0.16	0.12
8.8	0.78	0.53	0.37	0.27	0.20	0.15	0.11	0.09
9.0	0.50	0.34	0.26	0.19	0.14	0.11	0.08	0.07

Source. #7151, eff 12-10-99

Env-Ws 1703.32 Aquatic Life Criteria for Pentachlorophenol.

(a) To calculate the freshwater aquatic life acute criteria, in ug/l, for pentachlorophenol, the exponent "e" shall be raised to the power "x" where "x" is equal to the parenthetical expression 1.005 multiplied by the pH and to which quotient the value of 4.869 shall be subtracted, as follows:

$$\text{Acute Criteria} = e^x \text{ where} \\ x = [1.005 (\text{pH}) - 4.869]$$

(b) To calculate the freshwater aquatic life chronic criteria, in ug/l, for pentachlorophenol, the exponent "e" shall be raised to the power "x" where "x" is equal to the parenthetical expression 1.005 multiplied by the pH and to which quotient the value of 5.134 shall be subtracted, as follows:

$$\text{Chronic Criteria} = e^x \text{ where} \\ x = [1.005 (\text{pH}) - 5.134]$$

Source. #7151, eff 12-10-99

PART Env-Ws 1704 ALTERNATIVE SITE SPECIFIC CRITERIA

Env-Ws 1704.01 Purpose. The purpose of this part is to develop a procedure for determining alternative site specific criteria in the following cases:

- (a) For toxic substances not listed in Env-Ws 1703.21 through Env-Ws 1703.32;
- (b) Where site specific information is available which substantiates the use of different criteria; or
- (c) Where new information, not considered in the development of the criteria, is available.

Source. #7151, eff 12-10-99

Env-Ws 1704.02 Procedures.

(a) The procedure for determining alternative site specific criteria for the protection of human health shall be in accordance with EPA's draft Guidance on Assessment and Control of Bioconcentratable Contaminants in Surface Waters dated March 1991, and EPA's "Draft Revisions to the Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health," 63FR pages 43755 to 43828, dated August 14, 1998.

(b) The procedure for determining alternative site specific criteria for protection of aquatic life shall be as published in EPA's Interim Guidance on Determination and Use of Water-Effect Ratios for Metals dated February, 1994 and published in EPA's Water Quality Standards Handbook: Second Edition.

Source. #7151, eff 12-10-99

Env-Ws 1704.03 Modifications. If, based on the scientifically valid documentation presented by the applicant, the department determines that the proposed site specific criteria will protect the existing and designated uses of the waterbody, then the values obtained by those procedures for the protection of human health or aquatic life shall be formally incorporated into the state's water quality standards in subsequent amendments to these rules.

Source. #7151, eff 12-10-99

PART Env-Ws 1705 FLOW STANDARDS

Env-Ws 1705.01 Assimilative Capacity. Except for combined sewer overflows where 99 percent of the assimilative capacity shall be used to determine compliance, not less than 10 percent of the assimilative capacity of the surface water shall be held in reserve to provide for future needs.

Source. #7151, eff 12-10-99

Env-Ws 1705.02 Low Flow Conditions.

(a) The flow used to calculate permit limits shall be as specified in (b) through (d) below.

(b) For rivers and streams, the long-term harmonic mean flow, which is daily flow measurements divided by the sum of the reciprocals of the daily flows, shall be used to develop permit limits for all human health criteria for carcinogens.

(c) For tidal waters, the low flow condition shall be equivalent to the conditions that result in a dilution that is exceeded 99% of the time.

(d) For rivers and streams, the 7Q10 flow shall be used to apply aquatic life criteria and human health criteria for non-carcinogens.

Source. #7151, eff 12-10-99

PART Env-Ws 1706 SAMPLING AND ANALYSIS

Env-Ws 1706.01 Procedure. All procedures used for the purpose of collecting, preserving and analyzing samples shall be in conformance with 40 CFR Part 136 for wastewater and 40 CFR Part 141 for drinking water unless alternative procedures are specified in the surface water discharge permit.

Source. #7151, eff 12-10-99

PART Env-Ws 1707 MIXING ZONES

Env-Ws 1707.01 Designation.

- (a) Mixing zones shall be prohibited in Class A waters.
- (b) For Class B waters, the department shall designate a limited area or volume of the surface water as a mixing zone if the applicant provides sufficient scientifically valid documentation to allow the department to independently determine that all criteria in Env-Ws 1707.02 have been met.

Source. #7151, eff 12-10-99

Env-Ws 1707.02 Minimum Criteria. Mixing zones shall be subject to site specific criteria that, as a minimum:

- (a) Meet the criteria in Env-Ws 1703.03(c)(1).
- (b) Do not interfere with biological communities or populations of indigenous species;
- (c) Do not result in the accumulation of pollutants in the sediments or biota;
- (d) Allow a zone of passage for swimming and drifting organisms;
- (e) Do not interfere with existing and designated uses of the surface water;
- (f) Do not impinge upon spawning grounds and/or nursery areas of any indigenous aquatic species;
- (g) Do not result in the mortality of any plants, animals, humans, or aquatic life within the mixing zone;
- (h) Do not exceed the chronic toxicity value of 1.0 TUc at the mixing zone boundary; and
- (i) Do not result in an overlap with another mixing zone.

Source. #7151, eff 12-10-99

Env-Ws 1707.03 Technical Standards. Mixing zones shall be established in accordance with the procedures delineated in the "Technical Support Document for Water Quality-based Toxics Control" EPA/505/2-90-001, published by the EPA on March 1991.

Source. #7151, eff 12-10-99

PART Env-Ws 1708 ANTIDEGRADATION

Env-Ws 1708.01 Purpose. The purpose of these antidegradation provisions is to ensure that the following provisions of 40 CFR 131.12 are met:

- (a) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected;
- (b) For significant changes in water quality, where the quality of the surface waters exceeds levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected unless the department finds, after full satisfaction of the intergovernmental coordination and public participation provisions that, in accordance with Env-Ws 1708.10, allowing lower water quality is necessary to accommodate important economic or social development in the area in which the surface waters are located. In allowing such degradation or lower water quality, the department shall assure water quality adequate to fully protect existing uses. Further, the department shall assure that the highest statutory and regulatory requirements shall be

achieved for all new and existing point sources and that all cost effective and reasonable best management practices for nonpoint source control shall be implemented;

(c) For insignificant changes in water quality, where the quality of the surface waters exceeds levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected. In allowing such degradation or lower water quality, the department shall assure water quality adequate to protect existing uses fully. Further, the department shall assure that the highest statutory and regulatory requirements shall be achieved for all new and existing point sources and that all cost effective and reasonable best management practices for nonpoint source control shall be implemented;

(d) Where high quality surface waters constitute an outstanding resource waters (ORW), that water quality shall be maintained and protected; and

(e) In those cases where a potential water quality impairment is associated with a thermal discharge, the antidegradation provisions shall ensure that the requirements of section 316 of the Clean Water Act are met..

Source. #7151, eff 12-10-99

Env-Ws 1708.02 Applicability. Antidegradation shall apply to:

(a) Any proposed new or increased activity, including point source and nonpoint source discharges of pollutants, that would lower water quality or affect the existing or designated uses;

(b) A proposed increase in loadings to a waterbody when the proposal is associated with existing activities;

(c) An increase in flow alteration over an existing alteration; and

(d) All hydrologic modifications, such as dam construction and water withdrawals.

Source. #7151, eff 12-10-99

Env-Ws 1708.03 Submittal of Data. The applicant shall provide all information necessary to:

(a) Identify all existing uses, including:

(1) Freshwater, estuarine, and marine aquatic life present in the affected surface waters;

(2) Other wildlife that use or are dependent on the affected surface waters;

(3) Presence of water quality and physical habitat that support, or would support, aquatic life or other animal or plant life;

(4) Presence of indigenous species and communities;

(5) Presence of a specialized use of the waterbody, such as a spawning area or as a habitat for a federally or state listed threatened or endangered species;

(6) Use of the surface waters for recreation in or on the water, such as fishing, swimming, and boating, or use of the surface waters for commercial activity; and

(7) Whether or not current instream conditions or uses of the surface waters conflict with achieving and maintaining goal uses of the CWA at Section 101(a)(2) and the primary CWA objective to restore and maintain the chemical, physical, and biological integrity of the nation's surface waters;

(b) Determine the level of water quality necessary to maintain and protect those uses;

(c) Evaluate the potential impacts on existing uses due to the proposed discharge or activity by itself, and in

combination with other discharges or activities presently occurring;

(d) Ensure that existing instream uses and the level of water quality necessary to protect those uses shall be maintained and protected.

(e) Evaluate the magnitude, duration, and upstream and downstream extent of any lowering of high quality water due to the proposed discharge or activity by itself, and in combination with other discharges or activities presently occurring;

(f) Evaluate other factors as necessary to determine whether the proposed activity would cause significant or insignificant degradation, in accordance with Env-Ws 1708.09;

(g) If the discharge or activity is determined by the department to be significant, in accordance with Env-Ws 1708.08 and Env-Ws 1708.09, determine if a proposed lowering of water quality is necessary to achieve important economic or social development in accordance with Env-Ws 1708.10; and

(h) Ensure that all water quality criteria applicable to the waterbody in question shall not be violated.

Source. #7151, eff 12-10-99

Env-Ws 1708.04 Protection of Existing Uses.

(a) This section shall apply to all surface waters.

(b) A proposed discharge or activity shall not eliminate any existing uses or the water quality needed to maintain and protect those uses.

(c) Using the information provided at 1708.03, the department shall determine the existing uses for the waters in question.

Source. #7151, eff 12-10-99

Env-Ws 1708.05 Protection of Water Quality in ORW.

(a) Surface waters of national forests and surface waters designated as natural under RSA 483:7-a, I shall be considered outstanding resource waters (ORW).

(b) Water quality shall be maintained and protected in surface waters that constitute ORW, except that some limited point and nonpoint source discharges may be allowed providing that they are of limited activity which results in no more than temporary and short-term changes in water quality. "Temporary and short term" means that degradation is limited to the shortest possible time. Such activities shall not permanently degrade water quality or result at any time in water quality lower than that necessary to protect the existing and designated uses in the ORW. Such temporary and short term degradation shall only be allowed after all practical means of minimizing such degradation are implemented.

Source. #7151, eff 12-10-99

Env-Ws 1708.06 Protection of Class A Waters. In accordance with RSA 485-A:8, I, discharges of sewage or waste to Class A waters shall be prohibited. Proposed new or increased activities that the department determines do not involve the discharge of sewage or waste shall be reviewed in accordance with Env-Ws 1708.01 through Env-Ws 1708.12.

Source. #7151, eff 12-10-99

Env-Ws 1708.07 Protection of Water Quality in High Quality Waters.

(a) Subject to (b) below, high quality waters shall be maintained and protected, except that insignificant changes in water quality, as determined by the department in accordance with Env-Ws 1708.09, shall be allowed.

(b) Degradation of significant increments of water quality, as determined in accordance with Env-Ws 1708.09, in high quality waters shall be allowed only if it can be demonstrated to the department, in accordance with Env-Ws 1708.10, that allowing the water quality degradation is necessary to accommodate important economic or social development in the area in which the receiving waters are located.

(c) Economic/social benefits demonstration and alternatives analysis shall not be required for authorization of an insignificant lowering of water quality; However, in allowing a lowering of water quality, significant or insignificant, all reasonable measures to minimize degradation shall be utilized.

(d) If the waterbody is Class A Water, the requirements of Env-Ws 1708.06 shall also apply.

Source. #7151, eff 12-10-99

Env-Ws 1708.08 Assessing Waterbodies.

(a) The applicant shall characterize the existing instream water quality and determine if there is remaining assimilative capacity for each parameter in question.

(b) Existing instream water quality shall be calculated in accordance with Env-Ws 1705.02. Existing water quality shall be established based on point sources discharging at their allowed loadings and the highest loadings anticipated from nonpoint sources.

(c) Where flow alteration is involved, establishment of existing conditions shall be based on the existing maximum allowed water withdrawals or impoundment, diversion, or fluctuation of stream flow, as appropriate.

(d) Remaining assimilative capacity shall be evaluated by comparing existing instream water quality, as specified in (b) and (c) above, to the state's instream water quality criteria.

(e) If the type and frequency of the proposed discharge or activity causes the waterbody to be impacted at flows other than those listed in Env-Ws 1705.02, the department shall require the applicant to evaluate the impact of the proposed discharge at those other flows.

(f) Subject to (h) below, if the department determines, based on the information submitted, that there is no remaining assimilative capacity, no further degradation with regard to that parameter shall be allowed.

(g) Subject to (h) below, if the department determines, based on the information submitted, that there is some remaining assimilative capacity, then the department shall proceed in accord with Env-Ws 1708.09.

(h) The above determinations shall take into account Env-Ws 1705.01 which requires the department to reserve no less than 10% of a surface water's assimilative capacity.

Source. #7151, eff 12-10-99

Env-Ws 1708.09 Significant or Insignificant Determination.

(a) Any discharge or activity that is projected to utilize 20% or more of the remaining assimilative capacity for a water quality parameter, in terms of either concentration or mass of pollutants, or volume or flow rate for water quantity, shall be considered a significant lowering of water quality. Any person who proposes such a discharge or activity shall be required to demonstrate that the proposed lowering of water quality is necessary to achieve important economic or social development, in accordance with Env-Ws 1708.10, in the area where the waterbody is located.

(b) Subject to (d) below, those activities which cause an insignificant lowering of water quality shall not be required to demonstrate that they are necessary to provide important economic or social development.

(c) Activities under (b) above shall include, but not be limited to:

- (1) Short term or intermittent discharges such as hydrostatic testing of pipelines, fire pump test water, and uncontaminated stormwater discharges or site clean-up activities;
- (2) Permanent discharges such as uncontaminated noncontact cooling water, uncontaminated groundwater seepage, or unchlorinated or dechlorinated swimming pool water;
- (3) Facilities whose nonpoint source runoff is controlled through the use of best management practices; and
- (4) Any discharge or activity that is projected to use less than 20% of the remaining assimilative capacity for a water quality parameter, in terms of either concentration or mass for pollutants.

(d) If the department determines that, because of the following factors, the effect of a discharge results in a greater impact to the water quality than that normally found in insignificant discharges, it shall determine that the proposed activity or discharge is significant, regardless of the proposed consumption of the remaining assimilative capacity, and require the applicant to demonstrate, in accordance with Env-Ws 1708.10, that a lowering of water quality is necessary to achieve an important economic or social development:

- (1) The magnitude, duration, and spacial extent of the proposed change in water quality;
- (2) The cumulative lowering of water quality over time resulting from the proposed activity in combination with previously approved activities;
- (3) The possible additive or synergistic effects of the activity in combination with existing activities;
- (4) The magnitude of the mass load independent of the total assimilative capacity or change in receiving water pollutant concentration;
- (5) The toxic or bioaccumulative characteristics of the pollutant(s) in question;
- (6) The potential to stress sensitive biological resources such as indigenous species, rare species, and threatened or endangered species and their habitat;
- (7) The potential to stress sensitive recreational uses or water supply uses; or
- (8) The quality and value of the resource.

Source. #7151, eff 12-10-99

Env-Ws 1708.10 Demonstration of Economic or Social Development.

(a) Unless the department determines from documentation provided by the applicant, or other available information, that a proposed new or increased discharge or other activity would result in an insignificant impact to the existing water quality of a high quality waterbody, the department shall require that the applicant provide documentation, in accordance with the procedures delineated in "Interim Economic Guidance for Water Quality Standards" EPA- 823-B-95-002, published by the EPA on March 1995, that the:

- (1) Proposed project or activity will provide an important economic or social development in the area where the waterbody is located; and
- (2) Lowering of water quality is necessary to accommodate the development.

(b) Where the department finds, based on the information provided in Env-Ws 1708.10(a) that a proposed project would provide an important economic or social development, it shall require that an alternatives analysis be developed, in accordance with Env-Ws 1708.10(c), to determine if it is possible to realize those benefits either without lowering water quality or with a reduced degree of degradation.

(c) To determine if the lowering of water quality is necessary to accommodate an important economic or social benefit, the department shall require the applicant to evaluate the following alternatives and submit technically and scientifically valid information describing the benefits and impacts of each alternative on water quality and the degree to which the economic or social benefits could be realized if the alternatives were implemented:

- (1) Alternative methods of production or operation;
- (2) Improved process controls;
- (3) Water conservation practices;
- (4) Wastewater minimization technologies;
- (5) Non-discharging alternatives;
- (6) Improved wastewater treatment facility operation;
- (7) Alternative methods of treatment, including advanced treatment beyond applicable technology requirements of the Clean Water Act; and
- (8) Alternative sites, and associated water quality impacts at those sites.

(d) The department shall make a preliminary determination, based on the information provided in Env-Ws 1708.10(a) and (c), to approve or deny the applicant's request.

(e) If the department approves the applicant's request, the department shall provide the opportunity for public comment on its preliminary decision in accordance with Env-Ws 1708.11.

Source. #7151, eff 12-10-99

Env-Ws 1708.11 Public Participation and Intergovernmental Coordination.

(a) The department shall provide the opportunity for public comment on preliminary decisions to allow any lowering of water quality.

(b) The department shall issue a written notice to the public, the municipality in which the activity is located or proposed to be located and all potentially affected municipalities. The notice shall invite written comments to be submitted to the department and shall provide an opportunity to request a public hearing. For activities related to state surface water discharge permits, this public notice shall be a part of the normal public participation procedures associated with the issuance of the permit.

(c) The notice shall be published in a newspaper of general circulation in the municipality where the proposed activity will occur and shall include the following information:

- (1) A description of the proposed activity;
- (2) A description of the surface waters involved and their use classification;
- (3) A statement of the department's antidegradation provisions;
- (4) A determination that existing uses and necessary water quality will be maintained and protected;
- (5) A summary of the expected impacts on high quality waters;
- (6) A determination that where a lowering of water quality is allowed, all applicable water quality criteria shall be met, designated uses protected, and any higher water quality achievable by the most stringent applicable technology-based requirements shall be maintained;
- (7) A discussion of any other information that is relevant to how the activity complies or does not comply with these provisions;
- (8) The summary of the important economic or social development, if applicable;
- (9) A summary of the alternatives analysis and a finding that the lowering of water quality is necessary; and
- (10) The name, address, and telephone number of the person in the department where all written comments or requests for public hearing can be sent.

(d) To fulfill intergovernmental coordination, the department shall submit a copy of the public notice to the following agencies requesting comments:

- (1) NH department of resources and economic development;
- (2) NH department of health and human services;
- (3) NH fish and game department;
- (4) NH office of state planning;
- (5) US EPA Region I;
- (6) US Army Corps of Engineers;
- (7) US Fish and Wildlife Service;
- (8) National Marine Fisheries Service;

- (9) Local river advisory committees, if applicable;
- (10) National Park Service; and
- (11) Natural Resources Conservation Service.

(e) The department shall respond to all comments received as a result of public participation and intergovernmental coordination. If a request to hold a public hearing is received, the department shall hold a public hearing, in accordance with the provisions of Env-C 203.

(f) Following this public participation process, the department shall, based on any further information submitted during the public hearing, make a final decision to allow or deny the proposed impact on water quality. If the application is denied, the applicant may revise the submittal to decrease or eliminate the projected impact to high quality waters, and resubmit the application for consideration under the full review process.

Source. #7151, eff 12-10-99

Env-Ws 1708.12 Transfer of Water to Public Water Supplies. The transfer of waters from rivers, streams, lakes, or ponds to waters used as a public water supply shall be subject to the following conditions:

- (a) Both the source water in the area of the withdrawal and the receiving water shall be acceptable for water supply uses after treatment;
- (b) The chemical and physical water quality parameters of the source water shall be at least equal to the water quality of the receiving water;
- (c) The biological characteristics of the source water shall be compatible with those of the receiving water and shall not contain species of aquatic life that would adversely affect the species of aquatic life in the receiving water; and
- (d) The transfer and withdrawal shall comply with the antidegradation provisions of this part.

Source. #7151, eff 12-10-99

PART Env-Ws 1709 REMOVAL OF DESIGNATED USES

Env-Ws 1709.01 Requirements.

- (a) Before requesting that the state legislature remove a designated use, the department shall conduct a use attainability analysis in accord with 40 CFR Part 131.
- (b) Based on the information provided in (1) above, the department may propose to the state legislature, after public notice and comment, that a designated use which is not an existing use be removed or that subcategories of a use be established when attaining the designated use is not feasible because:

- (1) Naturally occurring substance concentrations prevent the attainment of the use;
- (2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions can be compensated by the discharge of sufficient volume of effluent discharges without violating state water conservation requirements to enable uses to be met;

- (3) Human-caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place;
- (4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use;
- (5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, unrelated to water quality, preclude attainment of aquatic life protection uses; or
- (6) Controls more stringent than those required by sections 301(b) and 306 of the Clean Water Act would result in substantial and widespread negative economic and social impact, as determined using the provisions delineated in "Interim Economic Guidance for Water Quality Standards", EPA-823-B-95-002, published by the EPA on March, 1995.

Source. #7151, eff 12-10-99

APPENDIX B

Strategic Monitoring Plan for Rivers and Streams

STATE OF NEW HAMPSHIRE
DEPARTMENT OF ENVIRONMENTAL SERVICES

DRAFT

STRATEGIC MONITORING PLAN
of the
SURFACE WATER QUALITY BUREAU



June 22, 1997

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SURFACE WATER QUALITY BUREAU
STRATEGIC MONITORING PLAN

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SURFACE WATER QUALITY BUREAU STRATEGIC MONITORING PLAN

EXECUTIVE SUMMARY

INTRODUCTION

The purpose of this report is to evaluate the Surface Water Quality Bureau's existing ambient monitoring program, and to develop a Strategic Monitoring Plan which will offer solutions for any perceived shortcomings of the existing program, and to recommend amendments to the program which will accommodate new EPA monitoring requirements.

The monitoring program plays a vital link in the Department's water quality management program. In that, it provides management with water quality feedback information which allows priorities to be set, funding to be allocated, and water pollution abatement projects to be established which will achieve the Department's goal of clean rivers and streams.

EXISTING MONITORING PROGRAM

The ambient monitoring program was initiated in 1974. Unfortunately, as a result of funding cutbacks, the program was phased out in 1979.

Lacking current sampling data needed to make management decisions concerning water quality issues, the sampling program was reinstated in 1988. This program provided sampling coverage of the entire State on a three-year rotating basin basis. In addition to ambient monitoring, the program also included:

- Trend Monitoring
- Whole Effluent Toxicity Testing
- Total Maximum Daily Load Studies
- Urban Stormdrainage Study
- Complaint Sampling and Resolution

Although the current ambient sampling program is highly efficient, it has suffered from a loss of federal funding. Unfortunately, this has raised some questions concerning the comprehensiveness of the existing monitoring program. Moreover, new EPA guidance for preparing the 305(b) report requires that the monitoring program be expanded. Specifically, for rivers and streams to be considered as *monitored* as opposed to being "evaluated," surface waters would have to be monitored four times a year, and samples collected at least every 25 miles. Accordingly, the proposed Strategic Monitoring Plan is based on these requirements and TMDL sampling needs.

PROPOSED MONITORING PLAN

Major components of the plan include:

- Environmental Indicators
- Annual Sampling Schedule
- Sampling Parameters
- Sampling Stations
- Sampling Frequency
- Program Costs

Environmental Indicators

To assess the success or lack of success in attaining clean waters, environmental indicators; such as,

- ◆ the percentage of rivers/streams meeting water quality standards; including the protection of public health and the environment in supporting:
 - (a) fish and shellfish consumption,
 - (b) safe recreation, and
 - (c) designated and existing uses;
- ◆ annual trends of targeted parameters; and
- ◆ the percentage of rivers with fish advisories.

Annual Sampling Schedule

The existing three year sampling schedule would be expanded to a five year rotating basin plan which would spread out the annual sampling load and cost. Annual Sampling would be as follows:

year one	Upper Connecticut Basin
year two	Lower Connecticut Basin
year three	Upper Merrimack Basin
year four	Lower Merrimack Basin
year five	Androscoggin/Saco/Piscataqua Basin

Sampling Parameters

About 25 water quality parameters would be sampled. See text for list of specific parameters.

Sampling Stations

✓ About 100 sampling stations in each of the five basins have been established to indicate the overall water quality of a geographical area, based on land use, population density, and hydrography. See attached map.

Sampling Frequency

Ambient samples would be collected during:

- ♦ June and August by summer interns, and
- ♦ April and October by DES staff.

Four samples would be obtained at 100 sites in each basin for a total of 400 samples per year.

Program Costs

• Ambient Sampling	\$127,000
• Whole Effluent Toxicity Tests	\$20,000
• Verification of Violations ...	<u>\$5,000</u>
Sub Total	\$152,000

Additional Sampling Costs of Related Programs

• TMDLs	\$30,000
• Volunteer Rivers Program ...	\$45,000
• Complaint Sampling	<u>\$3,000</u>
Sub Total	\$78,000

Total \$230,000

The single most factor which inhibits expanding the existing sampling program is the cost of analyzing samples. Accordingly, either funds from other programs must be shifted to the Ambient Monitoring Program, or new funding must be found, and/or lower laboratory costs must be considered by senior management in order to implement the recommended program.

NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES
WATER DIVISION
SURFACE WATER QUALITY BUREAU
STRATEGIC MONITORING PLAN

INTRODUCTION

The Department has had a rivers/stream monitoring program since the early 70's. However, to ensure that the Bureau's monitoring program is consistent with current monitoring requirements and is cost effective, the existing rivers/stream monitoring program will be completely re-evaluated in this report. Further, recommendations will be proposed to rectify any perceived shortcomings and to enhance the current ambient monitoring program thus ensuring that water quality monitoring needs will meet the requirements of the year 2000 and beyond.

GOAL

In general, the Bureau's monitoring plan is a vital link in the Department's water quality management program. That is, the monitoring program provides management with water quality feedback information for rivers and streams, which allows priorities, funding and water pollution abatement projects to be established which will achieve the Department's goal of protecting the State's surface waters.

In consonance with the Department's objective of achieving clean rivers and streams, the goal of the Strategic Monitoring Plan is to develop statistically accurate data which can be used to:

- ◆ *Access the current water quality status of rivers and streams;*
- ◆ *Identify potential water quality problems;*
- ◆ *Develop trend analysis;*
- ◆ *Measure progress in meeting environmental indicators;*
- ◆ *Evaluate the effectiveness of Point and Nonpoint Source Pollution Abatement Programs;*
- ◆ *Provide the public with "easy to understand" and reliable information about the quality of our rivers and streams;*
- ◆ *Provide information necessary to complete the 305(b) Report and 303(d) List;*
- ◆ *Provide water quality information to the Enforcement Section and the SRF program;*
- ◆ *Develop Wasteload Allocation and Total Maximum Daily Load Studies, as needed; and,*
- ◆ *Provide information to identify needed water quality research studies.*

TMDL PROCESS

The water quality monitoring program also plays a vital role in the State's Total Maximum Daily Load (TMDL) process, in that it provides the necessary data to perform TMDLs. TMDL studies are conducted to determine the maximum allowable wastewater loads which rivers and streams can safely assimilate and still meet applicable surface water quality standards. Once TMDL results are obtained it allows the Department to establish point and nonpoint controls to ensure that surface waters meet their legislated classification and water quality standards.

In essence, the TMDL process encompasses most of the essential steps of the water quality management program. Specifically, water quality monitoring data is used to model river/stream which is then converted into permit limitations to control point sources of pollution and Best Management Practices (BMPs) to abate nonpoint sources of contamination. Implementation of the requirements developed through the TMDL process ultimately will result in achieving the Department's goal of clean waters.

CURRENT MONITORING PLAN

A. EXISTING MONITORING ACTIVITIES

As part of developing the SMP, the following existing monitoring activities performed by the Surface Water Quality Bureau were reviewed and evaluated to determine if they need to be modified to meet the goal of the program.

(1) Ambient Sampling Program

The Bureau's Ambient Sampling Program began in 1974. Over three hundred stations were established and sampled on a year-round basis by four full-time technicians. With cutbacks in federal and state funding, this program was phased out in 1979. However, limited sampling continued until 1982, at which time sampling stopped all together, except for the permanent trend monitoring stations. Lack of current sampling data on which to base management decisions, the ambient monitoring program was reactivated in 1988. As there were far less financial and personnel resources than in prior years, the ambient program was modified based on the following precepts:

- Sampling would be performed with part time help during the summer months generally during critical low river flows and high water temperatures. This was based on the assumption that, if the rivers and streams were meeting water quality standards during the critical low flow periods of the summer, which represents a worse case situation, then the rivers and streams would meet water quality standards during the other times of the year as streams and rivers have more assimilative capacity during these periods.
- Sampling would take place on a three-year rotating watershed basis. That is, the entire State would be sampled in a three year period. To accomplish this, the State was divided into the following three primary basins:
 - Piscataqua/Androskoggin/Saco/Coastal

- Merrimack
- Connecticut
- The location of sampling stations in each of the primary basins were based on the following criteria.
 - * Upstream and downstream of major municipal and industrial wastewater treatment facilities to verify that the effluent from the wastewater treatment facilities was not causing water quality violations in the receiving stream.
 - * Upstream and downstream of large cities to determine impact of development.
 - * At headwaters to determine background conditions.
 - * At confluence of major tributaries to determine if significant changes were taking place within the watershed.
 - * At areas of concern, such as potential development.
 - * At suspected sources which could cause a violation of water quality standards.
- Using the preceding criteria, over 300 sampling stations were established in the State. Of this total, approximately 200 are fixed. The remaining 100 stations are repositioned each year to allow for gathering data based on current conditions.
- Samples would be collected three times over the course of the summer and analyzed for the following chemical specific parameters.

<u>Parameter</u>	<u>Frequency of Analyses (times/yr)</u>
E. coli	3
D.O./Temperature/	3
pH/Conductivity	3

<u>Parameter</u>	<u>Frequency of Analyses (times/yr)</u>
Chlorophyll A	1
BOD	3
COD	1
Alkalinity	1
Hardness	1
Turbidity	3
TS/TSS	3
NO ₃	1
TKN- NH ₃	3
Total Phosphorus	3
Metals*	1

* Aluminum, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Nickel, Selenium and Zinc.

These parameters were developed based on the chemicals and elements criteria contained in Surface Water Quality Standards and a knowledge of substances which may be discharged from industrial and municipal treatment facilities. It should be noted that to reduce the cost of analyses to coincide with the decrease of federal funds, not all of the parameters are analyzed three times per year.

(2) Trend Monitoring

In 1974, five National Water Quality Surveillance System (NWQSS) stations and 12 Primary Monitoring Network (PMN) trend stations were established. The location of these stations was based on primarily two factors. The first factor was to determine the water quality characteristics of major rivers before they enter a larger tributary area. The second factor was to determine the water quality characteristics of these major waters before they left the State. These seventeen stations are located in each of the State's major basins and have yielded long term water quality trends of the major tributaries in New Hampshire. These stations have shown that the State has made remarkable progress over the last 20 years in attaining the high water quality of its rivers and streams.

(3) Whole Effluent Toxicity (WET) Tests

To assess the individual and synergistic effects of all toxic parameters on aquatic life a WET test can be conducted. The WET test is performed by subjecting certain aquatic organisms to the receiving waters and when present, to the discharge from a point source. Although the results of this test will show whether or not the receiving water or the discharge from a point source is toxic, it will not identify the pollutant that is causing the toxicity. To identify the particular element which is causing toxicity, chemical specific testing is conducted. Using both these tests together gives the department a very comprehensive tool to not only assess water quality impacts to biological life forms, but to identify the offending substances.

The WET test is presently performed by all 100 municipal wastewater treatment plants and most of the 100 industrial wastewater treatment plants in the State. These tests are conducted at least once a year on their effluent as well as on the receiving stream at a location upstream of their discharge. This testing is a means of determining whether or not the effluent is toxic, and whether the receiving stream is toxic to aquatic life.

(4) Verification Study

Having sampled all the major rivers in the State at least twice, the ambient sampling program, except for trend monitoring at permanent stations, was put on hold in 1993 to undertake a Verification Study. The purpose of this study was to verify all "suspected" violations of water quality standards which appeared on the Department's 305(b) list of Impacted Surface Waters and to identify the source and to eliminate it. In short, the Verification Study was a major step in verifying suspected water quality exceedances and to eliminate or abate all known remaining sources of pollution in surface waters in consonance with the Department's mission. As this study is almost complete, the ambient sampling program will begin again this summer starting in the Connecticut River Basin.

(5) Total Maximum Daily Load Study

Total Maximum Daily Load (TMDL) studies are required by federal law and as previously discussed are used to determine the maximum amount of assimilative capacity of river or stream without violating water quality standards. These studies are usually initiated from an evaluation of the ambient sampling data.

TMDL studies require intensive sampling on a selected river segment for a short period of time. Sampling is performed over a two or three-day period during low flow, and high temperature conditions. The results of the sampling are then used to model the river under other stressful conditions. Information generated from TMDL studies is used to develop permit limits for point source discharges or to take corrective action against nonpoint source discharges. The Department has already performed TMDL's on the Lamprey River, the Sugar River and on the Contoocook River.

(6) Urban Drainage Study

The major potential source of NPS pollution in New Hampshire is storm water from urban and commercial areas. Since there is little technical data in New Hampshire to determine the impact on the receiving waters, a study was initiated in 1996 to determine the water quality characteristics of storm water discharges from residential and urban areas in New Hampshire.

Two sites were selected in Concord, one representing an urban area and the other a commercial area. These sites were sampled during four storm events in the spring and fall for parameters normally found in storm water, namely, alkalinity, E. coli, D.O., turbidity, temperature, total phosphorus, pH, BOD, hardness, Total Suspended Solids, TKN/NH₃/NO₃-NO₂, and metals (Aluminum, Copper, Lead, Zinc, Nickel, Cadmium, Chromium, Iron, Nickel).

The results of this study, which will be completed this summer, will be used to determine under what conditions storm water discharges from urban areas violates the State's water quality standards. Based on this information, the Department will develop a strategy for addressing storm water discharges.

(7) Complaints

The bureau presently receives about 60 surface water quality related complaints a year. Sampling for complaints is handled by a number of people in the Bureau, depending on whether the type of complaint concerns sludge, septage, POTW's or Nonpoint Sources. If the complaint cannot be resolved through technical assistance, it is turned over to our Compliance Section for subsequent enforcement.

(8) Subsurface Bureau's Sampling Program

To expand the coverage of the ambient sampling program, Subsurface Bureau staff are utilized for sampling in addition to their regular duties.

Under this program, sampling stations were established at the following locations:

- Upstream and downstream of industrial, residential, and commercial development.
- Upstream and downstream of suspected sources of pollution.

- Upstream and downstream of tributaries not sampled before.
- Upstream and downstream of suspected subsurface disposal problem areas.
- Upstream and downstream of suspected NPS areas.

Each of the seven regional subsurface staff sample fifteen stations once a month in dry and/or wet weather on a year-round basis for E. coli. In addition, two of these regional people also sample for D.O., Temperature, Conductivity, and pH.

It should be noted that the subsurface sampling results have verified the original premise of Ambient Sampling Program. That is, sampling during summer months is representative of the overall water quality in the State.

B. EVALUATION

Although the current monitoring program is highly efficient, it has suffered from a loss of federal and state funding. Over the years, the number of sampling stations and sampling parameters have had to be reduced. Unfortunately, this has raised some question of the comprehensiveness of the monitoring program. That is, are enough parameters and sample being taken to allow the Department to assess the majority of waters of the State's rivers and streams? Although the Bureau believes this to be true, there is only one way to prove that this is so; that is by taking more samples in more locations.

PROPOSED MONITORING PLAN

INTRODUCTION

Since the inception of the current ambient water quality monitoring plan, EPA has issued a new guidance concerning reporting requirements for the State's 305(b) Report. Under section 305(b) of the Clean Water Act, states must submit an assessment report to EPA every two years which describes the status of the quality of state waters. In accord with the new guidance, for surface waters to be considered *monitored*, they must be sampled four times a year at sampling stations located approximately every 25 miles. To meet these requirements, and those of the TMDL program, a revised comprehensive multi-year monitoring program is proposed below.

Major components of the plan include:

- Environmental Indicators
- Annual Sampling Schedule
- Sampling parameters
- Sampling Stations
- Sampling Frequency
- Quality Assurance/Quality Control
- Program Costs

Environmental Indicators

In addition to traditional core program performance measures, EPA now requires as a condition to receiving the Performance Partnership Grant that states also develop environmental indicators to assess the success or lack of success in attainment of cleaning-up the environment. Accordingly, the following indicators will be used to determine if rivers/streams meet water quality standards including legislated uses.

- ◆ The percentage of rivers/streams meeting Surface Water Quality standards, including the protection of public health and the environment by supporting:
 - (a) fish and shellfish consumption,
 - (b) safe recreation, and
 - (c) designated and existing uses.
- ◆ Annual trends of the following parameters: D.O., E. coli, dissolved solids, suspended solids, and pH.
- ◆ The percentage of assessed rivers/streams for which fish consumption advisories have been issued which restrict or prohibit the eating of fish.

- ◆ The percentage of shellfishing beds which are open for recreational purposes during dry weather.

Annual Sampling Schedule

Under the new 305(b) guidance, EPA provides for sampling on a five-year rotating basis. Using this guidance, all of the State's major rivers and streams would be sampled at least once every five years, rather than the existing three year sampling schedule. Sampling over a five year period will spread out the annual sampling costs and allow for the collection of more samples.

For sampling results to be meaningful, it is important to sample entire river systems, within a tributary basin area in a single sampling season. Isolated grab samples of rivers convey little useable information. Using the 23 River Basin Planning Areas developed by the Department, the following basins would be sampled on an annual basis. It should be noted that the subdivision of the particular basins sampled in a year was based on equalizing the sampling and analytical work load. That is, each year 100 sampling stations would be sampled in each of the watershed areas.

ANNUAL SAMPLING SCHEDULE

Year One UPPER CONNECTICUT

Connecticut River 5th Basin
Ammonoosuc River Basin

Year Two LOWER CONNECTICUT

Connecticut River 6th Basin
Sugar River Basin
Ashuelot River Basin
Miller River Basin

Year Three UPPER MERRIMACK

Pemigewasset River 5th Basin
Baker River Basin
Pemigewasset River 6th Basin
Merrimack River 6th Basin
Contoocook 6th Basin

Year Four LOWER MERRIMACK

Beards Brook Basin
Piscataquog River Basin
Souhegan River Basin
Contoocook River 5th Basin
Nashua River Basin
Merrimack River 7th Basin

Year Five ANDROSCOGGIN/SACO/PISCATAQUA

Dead Diamond River Basin
Androscoggin River Basin
Saco River Basin
Ossipee River Basin
Coastal Drainage Basin
Lamprey River Basin

***Sampling Parameters
Rivers/Streams***

To determine if rivers and streams are meeting water quality standards the following parameters will be sampled and analyzed at all ambient and trend monitoring stations:

Performed in field:

- Weather Conditions
- Stream Flow
- Turbidity
- pH
- Dissolved Oxygen
- Specific Conductance
- Temperature

Analyzed in lab:

- Suspended Solids
- Total Solids
- Alkalinity
- Hardness
- Nitrogen (TKN)
- Ammonia
- Total Phosphorus
- Metals: (*Aluminum*⁽¹⁾, Arsenic, Cadmium, Chromium, *Copper*⁽¹⁾, Iron, *Lead*⁽¹⁾, Nickel, Selenium, *Zinc*⁽¹⁾)
- Bacteria (E. coli & Enterococci)
- BOD
- COD

(1) Chronic test. All other metals test shall be Acute Test.

Rainwater

To determine the impact of rain on the background condition of rivers and streams, samples of rainwater, in the basin under study, will be analyzed for the following parameters:

pH
Hardness

Metals: Aluminum, Copper, lead and zinc
Total Phosphorus

Toxicity Testing

To determine the synergistic effects of toxic substances to aquatic life, Whole Effluent Toxicity (WET) tests will be conducted. The WET test shall be performed at all sampling stations once a year. If the WET test indicates a potential toxicity problem, chemical testing shall be conducted to verify and resolve the problem.

Sampling Stations

As previously discussed, for rivers and streams to be considered as *monitored* waters in accord with 305(b) guidance, sampling stations should be located no more than:

- ◆ 16 miles apart on a wadable stream, and
- ◆ 25 miles apart on a large river, unless specific field conditions demonstrate otherwise.

There are approximately 11,000 miles of major rivers and streams in the State. Therefore, every year of a five-year cycle about 2200 miles/year must be sampled.

$$11,000 \text{ miles} / 5 \text{ year} = 2200 \text{ miles/year}$$

Given that stations are on average about 25 miles apart, then 100 stations per year must be sampled.

$$2,200 \text{ miles/year} / 25 \text{ miles} = 100 \text{ stations/year}$$

The specific location of the stations will be established in the field using the following criteria:

- Up and downstream of potential point and nonpoint sources of pollution; such as, wastewater treatment facilities, CSO's, landfills, junkyards and urban stormwater.
- Areas representative of overall water quality of a geographical area.
- Up and downstream of water supplies.
- In the vicinity of posted recreational areas such as boating and swimming beaches.

Attached is a map showing preliminary sampling locations which will have to be verified in the field.

To identify representative sampling stations that would indicate overall water quality of a geographical area, land use, population density, hydrography and road GIS data layers were used.

Sampling Frequency

To be considered as a *monitored* water by EPA, rivers/streams need to be sampled four times a year. Accordingly, ambient river/stream samples will be collected during:

- ◆ June and August by summer interns, and
- ◆ April and October by DES staff.

During the month of July, summer interns would conduct additional sampling and surveys to locate sources of water quality violations which were discovered during the ambient sampling program.

In summary, four samples would be obtained at 100 sites in a particular basin for a total of 400 samples per year. Over a five year period 2000 samples would be obtained and analyzed to aid in determining the water quality of State rivers and streams.

At the end of the first five-year cycle, the number of sampling rounds in a year will be evaluated to determine if four samples are needed and cost-effective. It is suspected that samples obtained during the summer months of high temperatures and low stream flows impart more valuable water quality information than samples taken during other months of the year.

Quality Assurance/Quality Control

An important component of a monitoring program is to assure the quality of the data generated from the monitoring program. Quality assurance (QA) is a process which ensures that a monitoring program is adequately planned and conducted in a manner to provide data of excellent quality. QA is the set of operating principles and procedures for data collection, sample handling, analysis, data storage and data review that is used in the field and laboratory to provide data that will yield valid results. Quality control (QC) is the steps taken during sample collection and analysis to ensure that data quality meets the minimum standards established by the individual quality assurance project plan (QAPP). The QAPP is designed to ensure that the monitoring project or program meets its predetermined objectives by collecting usable information and avoiding the unnecessary expenditures of resources.

Program Costs

Based on the proposed number of samples, and excluding any DES personnel costs, it is estimated that the annual cost of laboratory analyses is as follows:

♦ Ambient Sampling	\$110,000
♦ Whole Effluent Toxicity Tests	\$20,000
♦ Verification of violations	<u>\$5,000</u>
	\$135,000

Staffing Costs

Summer Interns	\$11,000
Travel & Supplies	<u>\$6,000</u>
	\$17,000

<i>Total Annual Costs</i>	<i>\$152,000</i>
--	-------------------------

It should be noted that in addition to the costs for the proposed ambient sampling program, laboratory expenses will be needed for the following:

TMDLs	\$30,000
Complaints	<u>\$3,000</u>
	\$33,000

Volunteer River Program

Across New Hampshire, there are more than forty watershed associations, local river advisory committees, and other established river groups. Several of these organizations have existing volunteer monitoring programs or have expressed interest in establishing one. However, for the number of existing programs to remain stable or to increase, outside support is needed. The most valuable support for such programs includes training of volunteers, study design aide, program coordination, general technical assistance, and loans of monitoring equipment. A New Hampshire Volunteer River Coordinator can meet these needs and provide an excellent way for the Department of Environmental Services to enhance its river protection and public outreach efforts on the State's rivers, and build a river constituency.

This person will focus primarily on providing direct support to volunteer monitoring groups, and coordinating public education and outreach to schools, municipal officials, businesses, and other interested organizations as well as assisting existing groups with program development.

Funding for this program is being sought under the existing Demonstration grant. As a point of interest, estimated costs for the Volunteer River Program is:

FY-98	\$74,000
FY-99	\$46,000

Total monitoring costs of all these programs:

Ambient Sampling Program	\$152,000
TMDLs/Complaints	\$33,000
Volunteer Rivers Program (average)	\$45,000
Total	\$230,000

As a basis of comparison, the existing ambient monitoring program using summer interns costs about \$45,000.

Funding

To fund the proposed ambient monitoring program it will require an additional \$185,000 over and above the costs for the existing ambient sampling program.

Federal Funds

Over the years, federal funds from the grants normally targeted for the sampling program have steadily decreased. They are now at a level that would allow about \$45,000 per year to be spent on this program.

Laboratory Cost

Personnel costs to actually pick-up the samples is usually not a funding problem. However, the cost of analyzing samples is the single most important factor which inhibits expanding the existing monitoring program. Accordingly, the following options should be considered in reducing unit costs of analyzing samples.

- (1) lower unit prices for analyzing more samples as a result of economies of scale;
- (2) flat annual fee that would be paid to the lab;
- (3) dedicating a laboratory person to analyze only water quality samples;
- (4) provide the staff with competitive costs based on private labs.

APPENDIX C

***305(b) List
for
Rivers, Streams,
Lakes, Ponds
and Tidal Waters***

LEGEND FOR THE 305(B) LIST FOR RIVERS, STREAMS AND TIDAL WATERS

WATERBODY NAME / IDENTIFICATION NUMBER/ LOCATION

The “*Waterbody Name*” is the name of the receiving water.

The “*Identification Number*” is the EPA Waterbody System (WBS) identifier for the waterbody or mainstream being described.

The “*Location*” is the name of the town(s) where the water quality violation(s) have been found.

For each of the six river basins, and the coastal estuaries, the tables are presented alphabetically by waterbody name. For each waterbody, a separate listing (row) is provided for each water quality standard that is violated.

USE CLASS

The “*Use Class*” is the Legislative classification of the affected surface water: Class A or B (see Part II, Chapter 2).

OVERALL USE SUPPORT AND MILES (OR SQUARE MILES) AFFECTED

PS - The estimated miles or square miles of that portion of the waterbody which is partially supporting one or more designated uses.

NS - The estimated miles or square miles of that portion of the waterbody which is not supporting one or more designated uses.

DATA BASIS

Definitions for the terms “monitored” and “evaluated” may be found in Part III, Chapter 3.

ASSESSMENT BASIS

94-15SGR-2-1 Year of Sampling - Sampling Station Number - Number of water quality samples collected - Number of water samples that exceeded the water quality standards.

WATER QUALITY STANDARD EXCEEDED

The New Hampshire Water Quality Standard that is violated (see Part II, Chapter 2).

(D.O. stands for dissolved oxygen)

(PCB stands for polychlorinated biphenyls)

PROBABLE SOURCE

The probable source of pollution that resulted in a water quality exceedance.

(CSO stands for Combined Sewer Overflow)

INDIVIDUAL USE SUPPORT AND MILES (OR SQUARE MILES) AFFECTED

This column provides an indication of the degree of impairment (PS or NS as previously defined), and an estimate of the miles or square miles of surface water that are impaired due to the pollutant causing the water quality exceedance.

REQUIRED ACTION AND COMMENTS

This column generally includes the next recommended course of action and a more detailed description of where the water quality exceedance occurred.

DATA SOURCE

This is the source of information used to make the assessment for the specified waterbody.

***305(b) LIST
FOR
RIVERS AND STREAMS***

1998 305(b) List for NH Rivers and Streams			ANDROSCOGGIN RIVER BASIN					1 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
ANDROSCOGGIN RIVER NHR40001100-00.0109 BERLIN (MASON ST. BRIDGE)	B	Overlapping Files: 245, 434	98-8 AND 2-1	COPPER	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 433 1998 AMBIENT PROGRAM
ANDROSCOGGIN RIVER NHR40001100-00.0109 BERLIN (MASON ST. BRIDGE)	B	Overlapping Files: 245, 433	98-8 AND 2-1	ZINC	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 434 1998 AMBIENT PROGRAM
ANDROSCOGGIN RIVER NHR40001100-00.0109 BERLIN/GORHAM(FROM BRIDGE STREET DOWNSTREAM TO JUST BELOW GORHAM TOWN LINE)	B	NS 3.80 Overlapping Files: 2,3, 433,434	EVALUATED	PATHOGENS	ILLCIT SEWER CONNECTIONS TO STORM DRAINS	NS 3.80	CITY HAS BEEN WORKING TO ELIMINATE CROSS CONNECTIONS. PERFORM FOLLOW UP INSPECTIONS.	File #: 245 1991 "COMBINED SEWER OVERFLOW MONITORING PLAN" BY CARROLL E TAYLOR AND ASSOC.; 1990, 1996 AND 1997 AMBIENT SURVEYS.
ANDROSCOGGIN RIVER NHR40001100-00.0109 BERLIN/GORHAM(FROM WATSON ST PUMP STATION DOWNSTREAM PAST GORHAM TOWN LINE)	B	Overlapping Files: 3,245	EVALUATED	PATHOGENS	COMBINED SEWER OVERFLOWS (CSOs)	PS 1.00	CITY OF BERLIN INTENDS TO ELIMINATE CSO BY REDUCING INFILTRATION / INFLOW TO SEPARATED SEWER. CONTINUE TRACKING.	File #: 2 1991"COMBINED SEWER OVERFLOW MONITORING PLAN BY CARROLL E. TAYLOR & ASSOC.

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			ANDROSCOGGIN RIVER BASIN					2 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
ANDROSCOGGIN RIVER NHR40001100-00.0109 BERLIN/GORHAM/ SHELBURNE (FROM THE BURGESS MILL WWTF FACILITY IN BERLIN DOWNSTREAM)	B	NS 6.80 <div>Overlapping Files: 2,245,431,432</div>	MONITORED	DIOXINS (IN FISH TISSUE)	MAJOR INDUSTRIAL POINT SOURCE (PULP AND PAPER CO. OF AMERICA)	NS 7.80	IN 1994 THE PULP AND PAPER CO. OF AMERICA CONVERTED TO ECF WHICH REDUCED DIOXIN IN ITS DISCHARGE TO NONDETECTABLE LEVELS. TMDL TO BE CONDUCTED IN 2000. CONTINUE FISH MONITORING UNTIL LEVELS IN FISH TISSUE MEET ACCEPTABLE LEVELS.	File #: 3 1989 DPHS RISK ASSESSMENT REPORT
ANDROSCOGGIN RIVER NHR40001100-00.0109 SHELBURNE (BRIDGE AT BROWN PAPER CO. DAM)	B	<div>Overlapping Files: 3, 431</div>	98-3AND-2-1	ZINC	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 432 1998 AMBIENT PROGRAM
ANDROSCOGGIN RIVER NHR40001100-00.4050 BERLIN (FROM BRIDGE ST CROSSING UPSTREAM)	B	NS 0.20 <div>Overlapping Files: NONE</div>	EVALUATED	PATHOGENS	ILLICIT SEWER CONNECTIONS TO STORM DRAINS	NS 0.20	CITY HAS BEEN WORKING TO ELIMINATE CROSS CONNECTIONS. PERFORM FOLLOW UP INSPECTIONS.	File #: 105 1991 "COMBINED SEWER OVERFLOW MONITORING PLAN" BY CARROLL E TAYLOR AND ASSOC.
ANDROSCOGGIN RIVER NHR40001100-00.4050 BERLIN (NEW BRIDGE NORTH OF BRIDGE ST)	B	PS 1.00 <div>Overlapping Files: NONE</div>	98-9 AND 2-1	COPPER	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 435 1998 AMBIENT PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			ANDROSCOGGIN RIVER BASIN					3 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
ANDROSCOGGIN RIVER NHR40002010-00.0109 SHELBURNE (FROM THE NH/ME BORDER UPSTREAM)	B	NS 5.65 Overlapping Files: 430	MONITORED	DIOXINS (IN FISH TISSUE)	MAJOR INDUSTRIAL POINT SOURCE (PULP AND PAPER CO. OF AMERICA)	NS 5.65	IN 1994 THE PULP AND PAPER CO. OF AMERICA CONVERTED TO ECF WHICH REDUCED DIOXIN IN ITS DISCHARGE TO NONDETECTABLE LEVELS. TMDL TO BE CONDUCTED IN 2000. CONTINUE FISH MONITORING UNTIL LEVELS IN FISH TISSUE MEET ACCEPTABLE LEVELS.	File #: 246 1989 DPHS RISK ASSESSMENT REPORT
DEAD RIVER NHR40001100-00.0100 BERLIN (FROM CONFLUENCE WITH ANDROSCOGGIN RIVER UPSTREAM)	B	NS 1.00 Overlapping Files: 437,438	90-2-DED-3-3 96-1DED-5-1 97-1-DED-4-2 98-2DED-3-1	PATHOGENS	ILLICIT SEWER CONNECTIONS TO STORM DRAINS	NS 1.00	CITY HAS BEEN WORKING TO ELIMINATE CROSS CONNECTIONS. PERFORM FOLLOW UP INSPECTIONS.	File #: 108 1991 "COMBINED SEWER OVERFLOW MONITORING PLAN" BY CARROLL E TAYLOR AND ASSOC.; 1990, 1996 1997 AND 1998 AMBIENT SURVEYS.
DEAD RIVER NHR40001100-00.0100 BERLIN (FROM CONFLUENCE WITH ANDROSCOGGIN RIVER UPSTREAM)	B	Overlapping Files: 108, 438	98-2 DED 2-1	COPPER	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 437 1998 AMBIENT PROGRAM
DEAD RIVER NHR40001100-00.0100 BERLIN (FROM CONFLUENCE WITH ANDROSCOGGIN RIVER UPSTREAM)	B	Overlapping Files: 108, 437	98-2 DED 2-1	ZINC	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 438 1998 AMBIENT PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			ANDROSCOGGIN RIVER BASIN					4 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
DIAMOND RIVER NHR40001100-00-0100 SECOND COLLEGE GRANT (BRIDGE OFF OF RTE 16)	B	NS 1.00 <div>Overlapping Files: 441, 442, 443</div>	98-1 DIA 3-3	DISSOLVED OXYGEN (DO)	UNKNOWN	NS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 440 1998 AMBIENT PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN				1 8/24/00	
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
ASHUELOT RIVER NHR80201010-00.0100 KEENE (ADJACENT TO AND DOWNSTREAM OF BRENTWOOD GOLF COURSE).	B	PS 1.00 <div>Overlapping Files: NONE</div>	EVALUATED	SILTATION / EROSION	BRENTWOOD GOLF COURSE	PS 1.00	NO RIPARIAN VEGETATION, BANK EROSION & SEDIMENTATION. LACK OF RARE AND ENDANGERED MUSSEL SPECIES, AND DISTINCT DECREASE IN ABUNDANCE OF OTHER MUSSELS IN THESE AREAS. INVESTIGATE SOURCE. (NO DATA PROVIDED)	File #: 5 SEPT. 18, 1996 LETTER FROM US FISH & WILDLIFE SERVICE
ASHUELOT RIVER NHR80201050-00.0100 SWANZEY (COVERED BRIDGE ON SAWYERS CROSSING RD)	B	NS 1.00 <div>Overlapping Files: NONE</div>	99-16 ASH 3-1	PATHOGENS (E.COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 471 1999 AMBIENT PROGRAM
ASHUELOT RIVER NHR80201050-00.0109 HINSDALE(RTE 63 BRIDGE)	B	PS 1.00 <div>Overlapping Files: NONE</div>	99-2 ASH 2-1	COPPER	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 473 1998,1999 AMBIENT PROGRAM
ASHUELOT RIVER NHR80201050-00.0109 WINCHESTER (DOWNSTREAM OF RR BRIDGE (STATION 6-ASH))	B	PS 1.50 <div>Overlapping Files: NONE</div>	97-D1	HABITAT ALTERATIONS (BIOLOGICAL INTEGRITY)	UNKNOWN (HISTORIC DEPOSITION)	PS 1.50	INVESTIGATE SOURCE	File #: 307 DES BIOLOGY BUREAU'S BIOMONITORING PROGRAM
ASHUELOT RIVER NHR80201050-00.0109 WINCHESTER(BRIDGE UPSTREAM OF ROBERTSON DAM)	B	NS 1.00 <div>Overlapping Files: NONE</div>	98-4 ASH 3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 474 1998 AMBIENT PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN					2 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
BEAVER BROOK NHR80201030-00.0100 KEENE(FROM GEORGE ST [STA 7 BEV] DOWNSTREAM TO THE BRANCH RIVER CONFLUENCE.)	B	NS 2.50 <div>Overlapping Files: NONE</div>	94-2BEV-14-10 94-1BEV-2-2 95-2BEV-1-1 95-3BEV-2-2 95-4BEV-1-1 95-5BEV-2-2 95-5ABEV-1-1 95-6BEV-1-1 95-6ABEV-1-1 96-2BEV-7-5 97-2BEV-6-6	PATHOGENS (E. COLI)	UNKNOWN	NS 2.50	INVESTIGATE SOURCE. CONTINUE TO SAMPLE.	File #: 8 1994, 1995, 1996 AND 1997 AMBIENT SURVEYS
BLODGETT BROOK NHR80104070-00.1450 LEBANON (FROM THE MASCOMA RIVER CONFLUENCE UPSTREAM)	B	NS 1.00 <div>Overlapping Files: NONE</div>	94-1UNA-2-2 94-2UNA-1-1 95-1UNA-1-1 96-1UNA-8-2 96-3UNA-2-0 97-1UNA-6-1 99-1BGT-2-2	PATHOGENS (E. COLI)	AGRICULTURE - PASTURE GRAZING - FARM ANIMALS	NS 1.00	COORDINATE WITH NH DEPT OF AGRICULTURE.	File #: 12 1994,1995, 1996, 1997 AND 1999 AMBIENT SURVEY
CLAY BROOK NHR80104130-00.0100 CHARLESTOWN (FLING ROAD)	B	NS 1.00 <div>Overlapping Files: NONE</div>	EVALUATED	PATHOGENS	AGRICULTURE - CONFINED ANIMAL FEEDING OPERATIONS (NPS) - (SCRANTON FARM))	NS 1.00	INVESTIGATE TO DETERMINE IF BMPs WERE IMPLEMENTED. IF SO, RESAMPLE.	File #: 118 MAY 8, 1997 LETTER FROM DEPT. OF AGRICULTURE TO MR. BRUCE SCRANTON
CONNECTICUT RIVER NHR08010-MAIN STEM PITTSBURG DOWNSTREAM TO NH/MA BORDER	B	PS 195.11 <div>Overlapping Files: 20,21,22,23,25,26,2 7,250,252,331,332, 333,334,342,343,34 4,345,346,347,348, 349,350,351,352,35 3,354,355,356</div>	EVALUATED	PCBs (FISH FILLETS)	UNKNOWN	PS 265.35	NH, CT, VT AND MA TO CONDUCT FISH TISSUE STUDY IN 200/2001.	File #: 28 1989 REPORT "METALS AND ORGANICS SURVEY OF FISH FROM THE CONN. RIVER" BY USF & W &BHRA

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN					3 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
CONNECTICUT RIVER NHR08010-MAIN STEM PITTSBURG DOWNSTREAM TO NH/MA BORDER	B	Overlapping Files: 20,21,22,23,25,26,2 7,28,250,252,331,3 32,333,342,343,344 ,345,346,347,348,3 49,350,351,352,353 ,354,355,356	EVALUATED	CADMIUM (FISH FILLETS)	UNKNOWN	PS 265.35	NH, CT, VT AND MA TO CONDUCT FISH TISSUE STUDY IN 200/2001.	File #: 334 1989 REPORT "METALS AND ORGANICS SURVEY OF FISH FROM THE CONN. RIVER" BY USF & W &BHRA
CONNECTICUT RIVER NHR80101030-00.0100 CLARKSVILLE / PITTSBURG	B	PS 0.10 Overlapping Files: 28,334	MONITORED	SILTATION / EROSION	BANK OR SHORELINE MODIFICATION / DESTABILIZATION (DUE TO DEVELOPMENT)	PS 0.10	INVESTIGATE PROBLEM	File #: 354 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1995 CT RIVER EROSION INVENTORY OF COOS COUNTY NH AND ESSEX COUNTY VT, SUMMARY REPORT, COOS COUNTY CONSERVATION DISTRICT & ESSEX COUNTY NRCD
CONNECTICUT RIVER NHR80101030-00.0100 PITTSBURG (800-FOOT LONG BYPASS REACH BELOW FRANCIS/MURPHY DAM)	B	PS 0.20 Overlapping Files: 28,334	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 0.20	NO MINIMUM BYPASS FLOW RELEASES. IMPACTS TO FISH AND OTHER AQUATIC LIFE. INVESTIGATE TO DETERMINE IF IT IS AREA UPSTREAM OF TURBINE TAIL RACE OR THE DISCHARGE CHANNEL.	File #: 26 SEPT. 18, 1996 LETTER FROM US FISH & WILDLIFE SERVICE

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN					4 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
CONNECTICUT RIVER NHR80101060-00.0109 COLEBROOK / STEWARTSTOWN	B	PS 0.40 <div>Overlapping Files: 28,334</div>	MONITORED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 0.40	INVESTIGATE PROBLEM	File #: 355 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1995 CT RIVER EROSION INVENTORY OF COOS COUNTY NH AND ESSEX COUNTY VT, SUMMARY REPORT, COOS COUNTY CONSERVATION DISTRICT & ESSEX COUNTY NRCD
CONNECTICUT RIVER NHR80101110-00.0109 STRATFORD	B	PS 2.60 <div>Overlapping Files: 28,334</div>	MONITORED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 2.60	INVESTIGATE PROBLEM	File #: 350 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1995 CT RIVER EROSION INVENTORY OF COOS COUNTY NH AND ESSEX COUNTY VT, SUMMARY REPORT, COOS COUNTY CONSERVATION DISTRICT & ESSEX COUNTY NRCD
CONNECTICUT RIVER NHR80101110-00.1309 COLUMBIA	B	PS 0.10 <div>Overlapping Files: 28,334</div>	MONITORED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 0.10	INVESTIGATE PROBLEM	File #: 356 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1995 CT RIVER EROSION INVENTORY OF COOS COUNTY NH AND ESSEX COUNTY VT, SUMMARY REPORT, COOS COUNTY CONSERVATION DISTRICT & ESSEX COUNTY NRCD

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN					5 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
CONNECTICUT RIVER NHR80101160-00.0109 NORTHUMBERLAND	B	PS 2.90 <div>Overlapping Files: 28,334</div>	MONITORED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 2.90	INVESTIGATE PROBLEM	File #: 351 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1995 CT RIVER EROSION INVENTORY OF COOS COUNTY NH AND ESSEX COUNTY VT, SUMMARY REPORT, COOS COUNTY CONSERVATION DISTRICT & ESSEX COUNTY NRCD
CONNECTICUT RIVER NHR80101180-00.0109 LANCASTER	B	PS 0.80 <div>Overlapping Files: 28,334</div>	MONITORED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 0.80	INVESTIGATE PROBLEM	File #: 352 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1995 CT RIVER EROSION INVENTORY OF COOS COUNTY NH AND ESSEX COUNTY VT, SUMMARY REPORT, COOS COUNTY CONSERVATION DISTRICT & ESSEX COUNTY NRCD
CONNECTICUT RIVER NHR80101180-00.0109 LANCASTER (MANURE SITES ARE LOCATED ABOUT A MILE UPSTREAM OF THE MT. ORNE BRIDGE IN SOUTH LANCASTER).	B	PS 2.00 <div>Overlapping Files: 28,334</div>	EVALUATED	PATHOGENS	AGRICULTURE - PASTURE GRAZING - FARM ANIMALS (MANURE PILES ON BANK)	PS 2.00	INVESTIGATE.	File #: 24 SEPT. 18, 1996 LETTER FROM US FISH & WILDLIFE SERVICE
CONNECTICUT RIVER NHR80101230-00.0109 BATH	B	PS 3.10 <div>Overlapping Files: 28,334</div>	EVALUATED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 3.10	INVESTIGATE PROBLEM	File #: 342 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1992 CT RIVER EROSION INVENTORY SUMMARY REPORT, GCCD/ USDA SCS.

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams				CONNECTICUT RIVER BASIN				6 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
CONNECTICUT RIVER NHR80101230-00.0109 MONROE (TAILRACE OF MCINDOE DAM)	B	NS 1.00 Overlapping Files: 28,334	MONITORED	DISSOLVED OXYGEN (D.O.)	HYDROMODIFICATION - UPSTREAM IMPOUNDMENT	NS 1.00	STUDY IS BEING PERFORMED BY THE NEW ENGLAND POWER CO. RESAMPLE.	File #: 252 FIFTEEN MILE FALLS WATER QUALITY INTERIM REPORT, DECEMBER, 1996.
CONNECTICUT RIVER NHR80101230-00.1805 MONROE	B	PS 2.12 Overlapping Files: 28,334	EVALUATED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 5.00	INVESTIGATE PROBLEM	File #: 348 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1992 CT RIVER EROSION INVENTORY SUMMARY REPORT, GCCD/ USDA SCS.
CONNECTICUT RIVER NHR80101230-00.1805 MONROE (TAILRACE OF COMERFORD DAM)	B	PS 1.00 Overlapping Files: 28,334	MONITORED	DISSOLVED OXYGEN (D.O.)	HYDROMODIFICATION - UPSTREAM IMPOUNDMENT	PS 1.00	STUDY IS BEING PERFORMED BY THE NEW ENGLAND POWER CO. RESAMPLE.	File #: 22 FIFTEEN MILE FALLS WATER QUALITY INTERIM REPORT, DECEMBER 1996.
CONNECTICUT RIVER NHR80101230-00.1805 MONROE (UPSTREAM FROM THE MCINDOE DAM - TRANSPORT REACH THRU THE MCINDOE RESERVOIR).)	B	PS 2.50 Overlapping Files: 28,334	MONITORED	ALUMINUM (CHRONIC EXCEEDANCE BASED ON GRAB SAMPLE))	UNKNOWN	PS 2.50	STUDY IS BEING PERFORMED BY THE NEW ENGLAND POWER CO. RESAMPLE.	File #: 331 FIFTEEN MILE FALLS WATER QUALITY INTERIM REPORT, DECEMBER, 1996.
CONNECTICUT RIVER NHR80101230-00.1905 LITTLETON/MONROE (TAILRACE OF MOORE'S DAM)	B	NS 1.00 Overlapping Files: 28,334	MONITORED	DISSOLVED OXYGEN (D.O.)	HYDROMODIFICATION - UPSTREAM IMPOUNDMENT	NS 1.00	STUDY IS BEING PERFORMED BY THE NEW ENGLAND POWER CO. RESAMPLE.	File #: 21 FIFTEEN MILE FALLS WATER QUALITY INTERIM REPORT, DECEMBER, 1996.

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN					7 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
CONNECTICUT RIVER NHR80101230-00.1905 LITTLETON/MONROE (UPSTREAM FROM COMERFORD DAM TO THE RTE. 135 BRIDGE - TRANSPORT REACH THRU THE COMERFORD RESERVOIR).)	B	PS 4.50 Overlapping Files: 28,334	MONITORED	ALUMINUM (CHRONIC EXCEEDANCE BASED ON GRAB SAMPLE))	UNKNOWN	PS 4.50	STUDY IS BEING PERFORMED BY THE NEW ENGLAND POWER CO. RESAMPLE.	File #: 332 FIFTEEN MILE FALLS WATER QUALITY INTERIM REPORT, DECEMBER, 1996.
CONNECTICUT RIVER NHR80101230-00.2005 DALTON	B	PS 0.10 Overlapping Files: 28,334	MONITORED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 0.10	INVESTIGATE PROBLEM	File #: 353 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1995 CT RIVER EROSION INVENTORY OF COOS COUNTY NH AND ESSEX COUNTY VT, SUMMARY REPORT, COOS COUNTY CONSERVATION DISTRICT & ESSEX COUNTY NRCD
CONNECTICUT RIVER NHR80101230-00.2005 LITTLETON	B	Overlapping Files: 28,333,334	EVALUATED	SILTATION / EROSION	BANK OR SHORELINE MODIFICATION / DESTABILIZATION (DUE TO DEVELOPMENT)	PS 4.50	INVESTIGATE PROBLEM	File #: 346 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1992 CT RIVER EROSION INVENTORY SUMMARY REPORT, GCCD/ USDA SCS.
CONNECTICUT RIVER NHR80101230-00.2005 LITTLETON (UPSTREAM OF MOORE RESERVOIR DAM - TRANSPORT REACH THRU MOORE RESERVOIR)	B	Overlapping Files: 28,333,334	MONITORED	DISSOLVED OXYGEN (D.O.)	HYDROMODIFICATION - UPSTREAM IMPOUNDMENT	PS 2.00	STUDY IS BEING PERFORMED BY THE NEW ENGLAND POWER CO. RESAMPLE.	File #: 20 FIFTEEN MILE FALLS WATER QUALITY INTERIM REPORT, DECEMBER 1996

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN					8 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
CONNECTICUT RIVER NHR80101230-00.2005 LITTLETON/DALTON (UPSTREAM OF MOORE RESERVOIR DAM TO JOHNS RIVER - TRANSPORT REACH THRU MOORE RESERVOIR)	B	PS 10.23 <div>Overlapping Files: 20,28,334, 346</div>	MONITORED	ALUMINUM (CHRONIC EXCEEDANCE BASED ON GRAB SAMPLE))	UNKNOWN	PS 10.33	STUDY IS BEING PERFORMED BY THE NEW ENGLAND POWER CO. RESAMPLE.	File #: 333 FIFTEEN MILE FALLS WATER QUALITY INTERIM REPORT, DECEMBER, 1996.
CONNECTICUT RIVER NHR80104010-00.0109 HAVERHILL	B	PS 11.70 <div>Overlapping Files: 28,334</div>	EVALUATED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 11.70	INVESTIGATE PROBLEM	File #: 344 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1992 CT RIVER EROSION INVENTORY SUMMARY REPORT, GCCD/ USDA SCS.
CONNECTICUT RIVER NHR80104060-00.0109 LEBANON	B	PS 1.89 <div>Overlapping Files: 28,334</div>	EVALUATED	SILTATION / EROSION	BANK OR SHORELINE MODIFICATION/DESTABI LIZATION (DUE TO DEVELOPMENT)	PS 3.89	INVESTIGATE PROBLEM	File #: 345 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1992 CT RIVER EROSION INVENTORY SUMMARY REPORT, GCCD/ USDA SCS.
CONNECTICUT RIVER NHR80104060-00.0109 LEBANON FROM THE MASCOMA RIVER CONFLUENCE DOWNSTREAM)	B	PS 1.00 <div>Overlapping Files: 28,334</div>	MONITORED	PATHOGENS (E. COLI - WET WEATHER)	COMBINED SEWER OVERFLOWS (CSOs)	PS 1.00	CITY SUBMITTED CSO FACILITY PLAN WHICH RECOMMENDS ALMOST COMPLETE SEPARATION TO ELIMINATE CSOS. IMPLEMENTATION EXPECTED TO BEGIN IN 2001.	File #: 250 LETTER OF OCT.30, 1995 FROM CITY OF LEBANON TO EPA

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams

CONNECTICUT RIVER BASIN

9
8/24/00

Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
CONNECTICUT RIVER NHR80104060-00.0109 LEBANON (FROM CSO 024 DOWNSTREAM TO THE MASCOMA RIVER CONFLUENCE)	B	PS 1.00 Overlapping Files: 28,334	MONITORED	PATHOGENS (E. COLI - WET WEATHER)	COMBINED SEWER OVERFLOWS (CSOs)	PS 1.00	CITY SUBMITTED CSO FACILITY PLAN WHICH RECOMMENDS ALMOST COMPLETE SEPARATION TO ELIMINATE CSOS. IMPLEMENTATION EXPECTED TO BEGIN IN 2001.	File #: 27 LETTER OF OCT.30, 1995 FROM CITY OF LEBANON TO EPA
CONNECTICUT RIVER NHR80104060-00.0409 HANOVER	B	PS 3.00 Overlapping Files: 28,334	EVALUATED	SILTATION / EROSION	BANK OR SHORELINE MODIFICATION/DESTABI LIZATION (DUE TO DEVELOPMENT)	PS 3.00	INVESTIGATE PROBLEM	File #: 343 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1992 CT RIVER EROSION INVENTORY SUMMARY REPORT, GCCD/ USDA SCS.
CONNECTICUT RIVER NHR80104060-00.0409 LYME	B	PS 4.30 Overlapping Files: 28,334	EVALUATED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 4.30	INVESTIGATE PROBLEM	File #: 347 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1992 CT RIVER EROSION INVENTORY SUMMARY REPORT, GCCD/ USDA SCS.
CONNECTICUT RIVER NHR80104060-00.0409 ORFORD	B	PS 6.10 Overlapping Files: 28,334	EVALUATED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 6.10	INVESTIGATE PROBLEM	File #: 349 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1992 CT RIVER EROSION INVENTORY SUMMARY REPORT, GCCD/ USDA SCS.

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN					10 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
CONNECTICUT RIVER NHR80104060-00.0409 PIERMONT	B	PS 6.40 <div>Overlapping Files: 28,334</div>	EVALUATED	SILTATION / EROSION	AGRICULTURE - CROP RELATED AND/OR GRAZING RELATED SOURCES	PS 6.40	INVESTIGATE PROBLEM	File #: 25 CT RIVER WQ ASSESSMENT REPORT ; NH/VT JOINT RIVERS COMM; 1992 CT RIVER EROSION INVENTORY SUMMARY REPORT, GCCD/ USDA SCS.
CONNECTICUT RIVER NHR80104130-00.0109 NORTH WALPOLE (BYPASSED RIVER REACH BELOW BELLOWS FALLS DAM)	B	PS 0.20 <div>Overlapping Files: 28,334</div>	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 0.20	NO MINIMUM BYPASS FLOW RELEASES. INVESTIGATE	File #: 23 SEPT. 18, 1996 LETTER FROM US FISH & WILDLIFE SERVICE
GREAT BROOK NHR80104070-00.0109 LEBANON (FROM THE CONFLUENCE WITH THE MASCOMA RIVER UPSTREAM TO SPRING ST)	B	PS 0.50 <div>Overlapping Files: NONE</div>	MONITORED	PATHOGENS (E. COLI - WET WEATHER)	COMBINED SEWER OVERFLOWS (CSOs)	PS 0.50	CITY SUBMITTED CSO FACILITY PLAN WHICH RECOMMENDS ALMOST COMPLETE SEPARATION TO ELIMINATE CSOS. IMPLEMENTATION EXPECTED TO BEGIN IN 2001.	File #: 39 LETTER OF OCT. 30, 1995 FROM CITY OF LEBANON TO EPA
HALLS STREAM NHR80101050-00.0100 PITTSBURG(UPSTREAM OF THE NH / VT BORDER)	B	NS 2.00 <div>Overlapping Files: NONE</div>	93-2HAS-2-1 94-2HAS-1-1 97-1HAS-2-1	PATHOGENS (E. COLI)	AGRICULTURE - PASTURE GRAZING - FARM ANIMALS	NS 2.00	INVESTIGATE SOURCE. COORDINATE WITH THE NH DEPT. OF AGRICULTURE.	File #: 41 1993, 1994 AND 1997 AMBIENT SURVEY

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN					11 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
HARDY HILL BROOK NHR80104070-00.1450 LEBANON (FROM MASCOMA RIVER CONFLUENCE UPSTREAM)	B	NS 0.50 <div>Overlapping Files: NONE</div>	99-3 HDY 2-2	DISSOLVED OXYGEN (DO)	AGRICULTUR PASTURE, GRAZING FARM ANIMALS	NS 0.50	COORDINATE WITH NH DEPT. OF AGRICULTURE.	File #: 475 1999 AMBIENT PROGRAM
HARDY HILL BROOK NHR80104070-00.1450 LEBANON (FROM THE MASCOMA RIVER CONFLUENCE UPSTREAM)	B	NS 1.00 <div>Overlapping Files: NONE</div>	94-1UNB-2-1 99-2HDY-2-1	PATHOGENS (E. COLI)	AGRICULTURE - PASTURE GRAZING - FARM ANIMALS	NS 1.00	COORDINATE WITH THE NH DEPT. OF AGRICULTURE.	File #: 43 1994 AND 1999 AMBIENT SURVEY
LOVEJOY BROOK NHR80104070-00.3400 ENFIELD (FROM MASCOMA RIVER CONFLUENCE UPSTREAM)	B	NS 1.00 <div>Overlapping Files: 476</div>	94-1UNE-1-1 99-OALUV-2-1 99-OLUV-2-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	CONDUCT FURTHER INVESTIGATIONS.	File #: 53 1994 ABD 1999 AMBIENT SURVEY
LOVEJOY BROOK NHR80104070-00.3400 ENFIELD 9 FROM MASCOMA RIVER CONFLUENCE UPSTREAM)	B	<div>Overlapping Files: 53</div>	99-0 ALUV 2-1 99-0 LUV 2-1	DISSOLVED OXYGEN (DO)	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 476 1999 AMBIENT PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN				12 8/24/00	
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
MASCOMA RIVER NHR80104070-00.0109 LEBANON (FROM THE CONNECTICUT RIVER CONFLUENCE UPSTREAM TO THE RTE 120 CROSSING)	B	PS 4.00 <div>Overlapping Files: NONE</div>	MONITORED	PATHOGENS (E. COLI - WET WEATHER)	COMBINED SEWER OVERFLOWS (CSOs)	PS 4.00	CITY SUBMITTED CSO FACILITY PLAN WHICH RECOMMENDS ALMOST COMPLETE SEPARATION TO ELIMINATE CSOS. IMPLEMENTATION EXPECTED TO BEGIN IN 2001.	File #: 58 LETTER OF OCT. 30, 1995 FROM CITY OF LEBANON TO EPA
MINK BROOK NHR80104060-00.0100 HANOVER	B	PS 1.00 <div>Overlapping Files: NONE</div>	97-1MKB-9-3	PATHOGENS (E. COLI)	NATURAL SOURCES	PS 1.00	SAMPLED IN 1997 - BACTERIA EXCEEDANCES DUE TO NATURAL SOURCES- WETLANDS.	File #: 308 DES 1997 AMBIENT WATER QUALITY MONITORING REPORT
MINNEWAWA BROOK NHR80201030-00.0100 KEENE	B	PS 1.00 <div>Overlapping Files: NONE</div>	97-6MWB-2-1	PATHOGENS (E. COLI)	NATURAL SOURCES	PS 1.00	SAMPLED IN 1997 - BACTERIA EXCEEDANCES DUE TO NATURAL SOURCES- ANIMALS	File #: 309 DES 1997 AMBIENT WATER QUALITY MONITORING REPORT
MIREY BROOK NHR80201050-00.0100 WINCHESTER	B	PS 1.00 <div>Overlapping Files: NONE</div>	97-1MIR-2-1 97-1MIR-2-1	PATHOGENS (E. COLI)	NATURAL SOURCES	PS 1.00	SAMPLED IN 1997 - BACTERIA & DO EXCEEDANCES DUE TO NATURAL SOURCES (ANIMALS &WETLANDS)	File #: 310 DES 1997 AMBIENT WATER QUALITY MONITORING REPORT
MORRIS BROOK NHR80104020-00.0100 HAVERHILL	B	NS 1.50 <div>Overlapping Files: NONE</div>	94-M0B001-6-1 94-MOB013-6-6 94-MOB014-6-5 94-MOB015-6-5 94-MOB016-6-6 94-MOB017-5-3	PATHOGENS (E. COLI)	AGRICULTURE - PASTURE GRAZING - FARM ANIMALS	NS 1.50	SECTION 319 PROJECT COMPLETED IN 1995. RESAMPLE IN 2000	File #: 66 1992-1994 MONITORING REPORT AND CONNECTICUT RIVER WATCH PROGRAM DEC. 1995

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN					13 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
PARTRIDGE BROOK NHR80104176-00.0100 WESTMORELAND (HATT RD)	B	NS 1.00 Overlapping Files: NONE	99-3 PTB 3-1	PATHOGENS (E.COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 478 1999 AMBIENT PROGRAM
ROARING BROOK NHR80201050-00.0100 RICHMOND (OFF RTE 119)	B	PS 1.00 Overlapping Files: NONE	99-2 ROR 3-1	COPPER	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 477 1999 AMBIENT PROGRAM
SOUTH BRANCH ASHUELOT RIVER NHR80201040-00.0100 MARLBOROUGH	B	PS 2.00 Overlapping Files: NONE	97-6SBA-8-1	PATHOGENS (E. COLI)	NATURAL SOURCES	PS 2.00	SAMPLED IN 1997 - BACTERIA EXCEEDANCES DUE TO NATURAL SOURCES- ANIMALS	File #: 311 DES 1997 AMBIENT WATER QUALITY MONITORING REPORT
SOUTH BRANCH ASHUELOT RIVER NHR80201040-00.0100 TROY	B	PS 2.00 Overlapping Files: NONE	97-8ASBA-2-1	PATHOGENS (E. COLI)	NATURAL SOURCES	PS 2.00	SAMPLED IN 1997 - BACTERIA EXCEEDANCES DUE TO NATURAL SOURCES- ANIMALS	File #: 312 DES 1997 AMBIENT WATER QUALITY MONITORING REPORT
SUGAR RIVER NHR80104100-00.0100 CLAREMONT (FROM THE OLD WWTF OUTFALL UPSTREAM.)	B	NS 1.10 Overlapping Files: 92	93-4SGR-2-2 99-4SGR-1-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.10	CONDUCT FURTHER INVESTIGATIONS.	File #: 251 1993 AND 1999 AMBIENT SURVEY, CONNECTICUT RIVER WATCH PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			CONNECTICUT RIVER BASIN					14 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
SUGAR RIVER NHR80104100-00.0100 CLAREMONT (530 FOOT-LONG BYPASSED REACH AT LOWER VILLAGE-LAFAYETTE STREET HYDRO)	B	Overlapping Files: 251	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 0.10	40 CFS BYPASS FLOWS TOO LOW (0.16 CSM). INVESTIGATE.	File #: 92 SEPT. 18, 1996 LETTER FROM US FISH & WILDLIFE
SUGAR RIVER NHR80104100-00.0109 CLAREMONT (FROM THE CONFLUENCE WITH THE CONNECTICUT RIVER UPSTREAM TO THE LOCATION OF THE OLD WWTF OUTFALL)	B	NS 4.30 Overlapping Files: NONE	93-3SGR-2-1 93-SUR010-5-3 93-SUR012-5-3 92-SUR010-4-3 92-SUR012-4-4 92-SUR016-5-3 93-SUR016-5-3 96-3SGR-5-0 97-3SGR-6-2 97-1SGR-1-0 99-1SGR-1-1 99-3SGR-1-1 99-2SGR-1-1	PATHOGENS (E. COLI)	UNKNOWN	NS 4.30	CONDUCT FURTHER INVESTIGATIONS.	File #: 94 1993, 1996, 1997 AND 1999 AMBIENT SURVEYS CONNECTICUT RIVER WATCH PROGRAM
SUGAR RIVER (DOWNSTREAM OF SUNAPEE WWTF) NHR80104100-00.0100 SUNAPEE	B	PS 1.00 Overlapping Files: NONE	EVALUATED	DISSOLVED OXYGEN (DO)	MAJOR MUNICIPLE POINT SOURCE (SUNAPEE WWTF)	PS 1.00	PRELIMINARY MODELING SHOWS POTENTIAL FOR DO VIOLATION. EPA TO CONDUCT TMDL.	File #: 480 PRELIMINARY MODELING PERFORMED BY NHDES IN 1999
WHEELLOCK NHR80201050-00.0100 SWANZEY (COBBLE HILL RD)	B	NS 1.00 Overlapping Files: NONE	99-4 WEB 3-1	DISSOLVED OXYGEN (DO)	UNKNOWN	NS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 479 1999 AMBIENT PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams				MERRIMACK RIVER BASIN				1 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
BAILEY BROOK NHR70003020-00.0100 STODDARD (RTE 123)	B	NS 1.00 Overlapping Files: NONE	99-1 BAI 3-3	DISSOLVED OXYGEN (DO)	UNKNOWN	NS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 451 1999 AMBIENT PROGRAM
BEAVER BROOK NHR70002240-00.0100 DERRY/ LONDONDERRY (FROM LANDFILL DOWNSTREAM TO KENDALL POND IN LONDONDERRY)	B	PS 1.50 Overlapping Files: NONE	MONITORED 1993 AND 1994 99-10" BVR 1-1 99-10' BVR 1-1	IRON	LANDFILLS - TOWN OF DERRY	PS 1.50	IRON CONCENTRATIONS UPSTREAM OF LANDFILL WERE ABOUT THE SAME AS DOWNSTREAM- MAY BE NATURAL- CONDUCT FURTHER INVESTIGATIONS	File #: 9 SAMPLES TAKEN DOWNSTREAM OF LANDFILL IN 1993 & 1994 SURFACE WATER QUALITY BUREAU; 1999 AMBIENT PROGRAM
BEAVER BROOK NHR70002240-00.0100 PELHAM (GAGE HILL RD)	B	NS 1.00 Overlapping Files: NONE	99-3 BVR 3-0	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED, CONDUCT FURTHER INVESTIGATIONS	File #: 453 1999 AMBIENT PROGRAM
BOG BROOK NHR70002120-00.0100 NEW BOSTON (BOG BROOK RD)	B	NS 1.00 Overlapping Files: 455	99-5 BOG 2-1	DISSOLVED OXYGEN (DO)	UNKNOWN	NS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 454 1999 AMBIENT PROGRAM
CONTOOCOOK RIVER NHR70003010-00.0100 HANCOCK /BENNINGTON/ ANTRIM	B	PS 1.00 Overlapping Files: NONE	93-25' CTC-3-1 95-25' CTC-5-0 96-25' CTC-3-0 98-25' CTC 3-0 99-25' CTC 6-0	DISSOLVED OXYGEN (D.O.)	MAJOR MUNICIPAL POINT SOURCE (PETERBOROUGH WWTF)	PS 1.00	TMDL TO BE COMPLETED IN 2000	File #: 32 1993 ,1994, 1995, 1996 AND 1999 AMBIENT PROGRAM AMBIENT SAMPLING PROGRAMS.

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			MERRIMACK RIVER BASIN					2 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
CONTOOCOOK RIVER NHR70003010-00.0100 HANCOCK /BENNINGTON/ ANTRIM	B	PS 1.00 Overlapping Files: 458	94-22CTC-2-1 99-22 CTC 3-0	DISSOLVED OXYGEN (D.O.)	MAJOR INDUSTRIAL POINT SOURCE (MONADNOCK PAPER INC)	PS 1.00	TMDL TO BE COMPLETED IN 2000	File #: 337 1993 ,1994, 1995, 1996 AND 1999 AMBIENT SAMPLING PROGRAM
CONTOOCOOK RIVER NHR70003030-00.0100 HENNIKER (AROUND RTE 114 BRIDGE)	B	PS 1.00 Overlapping Files: NONE	95-13CTC-3-1 96-13CTC-2-1 99-13 CTC -1-0	ZINC	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 247 1995, 1996 AND 1999 AMBIENT SURVEY
CONTOOCOOK RIVER NHR70003030-00.0100 HILLSBORO (RIVER REACH BELOW FRANKLIN PIERCE LAKE/JACKMAN HYDRO PROJECT)	B	PS 0.10 Overlapping Files: NONE	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 0.10	LOW FLOWS AND FLUCTUATIONS FROM HYDRO DISCHARGE. FERC # 06116-000. INVESTIGATE	File #: 31 SEPT.18,1996 LETTER FROM US FISH & WILDLIFE SERVICES
CONTOOCOOK RIVER NHR70003060-00.0100 BOSCAWEN & PENACOOK (4000 FOOT-LONG REACH BYPASSED BY ROLFE CANAL HYDRO)	B	Overlapping Files: 249	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 0.80	50 CFS BYPASS FLOWS TOO LOW. FERC # 03342-008 & 06689-008. INVESTIGATE	File #: 30 SEPT. 18, 1996 LETTER FROM U.S. FISH & WILDLIFE SERVICE
CONTOOCOOK RIVER NHR70003060-00.0100 BOSCAWEN (JUST UPSTREAM OF CONFLUENCE WITH MERRIMACK RIVER)	B	PS 1.00 Overlapping Files: 30	96-1'CTC-1-1	ZINC	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 249 1996 AMBIENT SURVEY

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			MERRIMACK RIVER BASIN					3 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
CONTOOCOOK RIVER NHR70003060-00.0100 HOPKINTON, CONCORD (FROM BLACKWATER RIVER CONFLUENCE DOWNSTREAM)	B	PS 5.00 <div>Overlapping Files: NONE</div>	96-5CTC-1-1	ZINC	UNKNOWN	PS 5.00	CONDUCT FURTHER INVESTIGATIONS	File #: 248 1996 AMBIENT SURVEY
FRAZIER BROOK NHR70003050-00.0100 DANBURY/ WILMOT (FROM LANDFILL DOWNSTREAM TO EAGLE POND)	A	PS 1.40 <div>Overlapping Files: NONE</div>	MONITORED 1993&1994	IRON	LANDFILLS - OLD DANBURY LANDFILL	PS 1.40	CLASS A WATERSHED. LANDFILL WAS CLOSED IN 1986 & CAPPED WITH A SYNTHETIC CAP, AN UPGRADIENT GROUNDWATER DIVERSION TRENCH AND A DOWNGRADIENT GROUNDWATER INTERCAPETOR TRENCH. TMDL TO BE CONDUCTED IN 2000. CONTINUE TO SAMPLE.	File #: 37 SAMPLES TAKEN DOWNSTREAM OF LANDFILL IN 1993 & 1994 by SWQB
FURNACE BROOK NHR70002170-00.0100 NEW IPSWICH (UPSTREAM OF THE SOUHEGAN RIVER)	B	PS 1.50 <div>Overlapping Files: NONE</div>	95-NI1-9-1 95-NI2-9-1 95-NI4-9-4 95-NI5-9-4	PATHOGENS (E. COLI - WET WEATHER)	UNKNOWN	PS 1.50	RESAMPLE	File #: 111 1996 DES DRAFT SOUHEGAN RIVER STUDY
GUES MEADOW BROOK NHR70002210-00.0100 LOUDON (RTE 106)	B	NS 1.00 <div>Overlapping Files: NONE</div>	99-2 GUE 2-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 459 1999 AMBIENT PROGRAM
KELLEY BROOK NHR70002210-00.0100 PLAISTOW (RTE 125)	B	NS 1.00 <div>Overlapping Files: 461</div>	99-1 KEL 3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED, CONDUCT FURTHER INVESTIGATIONS	File #: 460 1999 AMBIENT PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			MERRIMACK RIVER BASIN					4 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
KELLEY BROOK NHR70002210-00.0100 PLAISTOW (RTE 125)	B	Overlapping Files: 460	99-1 KEL 4-3	DISSOLVED OXYGEN (DO)	UNKNOWN	NS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 461 1999 AMBIENT PROGRAM
MAD RIVER NHR70001040-00.0100 CAMPTON (600 FOOT - LONG BYPASS REACH AT CAMPTON HYDRO PROJECT)	B	PS 0.10 Overlapping Files: NONE	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 0.10	INSUFFICIENT FLOW FOR FISH HABITAT AND PROBLEM FOR DOWNSTREAM ZONE-OF-PASSAGE FOR SALMON SMOLTS. FERC # 1893-016. INVESTIGATE	File #: 56 SEPT. 18,1996 LETTER FROM US FISH & WILDLIFE SERVICES
MERRIMACK RIVER NHR70002050-00.0100 BOW (BYPASSED REACH AT GARVINS FALLS HYDRO)	B	PS 0.10 Overlapping Files: NONE	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 0.10	NO MINIMUM BYPASS FLOWS. FERC # 1893-016. INVESTIGATE.	File #: 60 SEPT. 18,1996 LETTER FROM US FISH & WILDLIFE SERVICES
MERRIMACK RIVER NHR70002090-00.0100 HOOKSETT (BYPASSED REACH AT HOOKSETT HYDRO)	B	PS 0.10 Overlapping Files: NONE	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 0.10	NO MINIMUM BYPASS FLOWS. FERC # 1893-016. INVESTIGATE	File #: 61 SEPT. 18,1996 LETTER FROM US FISH & WILDLIFE SERVICES
MERRIMACK RIVER NHR70002090-00.0100 MANCHESTER (BYPASSED REACH AT AMOSKEAG HYDRO)	B	Overlapping Files: 63	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 0.30	NO MINIMUM BYPASS FLOWS. FERC # 1893-016. INVESTIGATE	File #: 62 SEPT. 18,1996 LETTER FROM US FISH & WILDLIFE SERVICES

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			MERRIMACK RIVER BASIN					5 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
MERRIMACK RIVER NHR70002090-00.0100 MANCHESTER (FROM THE STARK BROOK CONFLUENCE TO THE COHAS BROOK CONFLUENCE)	B	PS 6.50 <div>Overlapping Files: 62,156,462</div>	95-8MER-1-1 99-8 MER 4-0 99-8 MER 3-1	PATHOGENS (E. COLI - WET WEATHER)	COMBINED SEWER OVERFLOWS (CSOs)	PS 6.50	GEOMETRIC MEAN EXCEEDE IN 1998 AND 1999. MANCHESTER IS UNDER CONSENT ORDER TO IMPLEMENT PHASE 1 OF CSO FACILITY PLAN WHICH WILL ELIMINATE APPROXIMATELY 50% OF THE CSOS BY 2010.	File #: 63 PHASE II CSO FACILITIES PLAN BY CAMP, DRESSER & MCKEE, INC., MARCH 1993; 1996 MERRIMACK RIVER WATER QUALITY REPORT).
MERRIMACK RIVER NHR70002090-00.0100 MANCHESTER (JUST UPSTREAM OF COHAS BROOK CONFLUENCE) HOOKSETT/MANCHESTER/ LITCHFIELD/MERRIMACK	B	<div>Overlapping Files: 62, 63, 462</div>	95-8MER-1-1	LEAD (CHRONIC EXCEEDANCE BASED ON GRAB SAMPLES - WET WEATHER)	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 156 1996 MERRIMACK RIVER WATER QUALITY REPORT
MERRIMACK RIVER NHR70002140-00.0100 MERRIMACK (UPSTREAM OF THE SOUHEGAN RIVER CONFLUENCE)	B	PS 1.00 <div>Overlapping Files: NONE</div>	95-6MER-1-1	PATHOGENS (E. COLI - WET WEATHER)	COMBINED SEWER OVERFLOWS (CSOs)	PS 1.00	RESAMPLE.	File #: 336 1996 MERRIMACK RIVER WATER QUALITY REPORT
MERRIMACK RIVER NHR70002210-00.0100 NASHUA (FROM THE NASHUA RIVER CONFLUENCE DOWNSTREAM)	B	PS 4.50 <div>Overlapping Files: NONE</div>	95-1MER-1-1	PATHOGENS (E. COLI - WET WEATHER)	COMBINED SEWER OVERFLOWS (CSOs)	PS 4.50	NASHUA IS UNDER A.O TO ELMINATE CSOS BY SEPARATION BY 2020.	File #: 64 PHASE I CSO MONITORING/DISCHARGE REPORT BY CAMP, DRESSER & MCKEE, 9/92

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			MERRIMACK RIVER BASIN					6 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
NASHUA RIVER NHR70004120-00.0100 HOLLIS (AROUND ROUTE 111 BRIDGE)	B	PS 1.00 Overlapping Files: 463	94-6-Nsh-1-1 95-6Nsh-1-1	LEAD (CHRONIC EXCEEDANCE BASED ON GRAB SAMPLES - WET & DRY WEATHER)	UNKNOWN	PS 1.00	RESAMPLE	File #: 335 1996 MERRIMACK RIVER WQ REPORT
NASHUA RIVER NHR70004120-00.0100 NASHUA (RTE 3 BRIDGE)	B	PS 1.00 Overlapping Files: 335	99-6 NSH 1-1	DISSOLVED OXYGEN (DO)	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 463 1999 AMBIENT PROGRAM
NASHUA RIVER NHR70004120-00.0109 NASHUA (AROUND CANAL STREET BRIDGE)	B	PS 1.00 Overlapping Files: 68	94-2-Nsh-1-1 95-2Nsh-1-1	LEAD (CHRONIC EXCEEDANCE BASED ON GRAB SAMPLES - WET & DRY WEATHER)	UNKNOWN	PS 1.00	RESAMPLE	File #: 67 1996 MERRIMACK RIVER WQ REPORT
NASHUA RIVER NHR70004120-00.0109 NASHUA (FROM THE BROAD ST CSO TO THE MERRIMACK RIVER)	B	PS 3.10 Overlapping Files: 67	MONITORED	PATHOGENS (E. COLI - WET WEATHER)	COMBINED SEWER OVERFLOWS (CSOs)	PS 3.10	NASHUA IS UNDER A.O TO ELIMINATE CSOS BY SEPARATION BY 2020.	File #: 68 PHASE I CSO MONITORING/DISCHARGE REPORT BY CAMP, DRESSER & MCKEE, INC. SEPT. 1992
NESENKEAG BROOK NHR70002180-00.0100 LONDONDERRY (WEST RD)	B	NS 1.00 Overlapping Files: NONE	99-3 NSB 2-2	DISSOLVED OXYGEN (DO)	UNKNOWN	NS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 464 1999 AMBIENT PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			MERRIMACK RIVER BASIN					7 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
PISCATAQUOG RIVER NHR70002120-00.0100 GOFFSTOWN (2.7 MI. LONG RIVER REACH BELOW GREGGS FALLS HYDRO)	B	PS 2.70 <div>Overlapping Files: NONE</div>	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 2.70	20CFS MINIMUM FLOWS TOO LOW (0.1 CSM) IMPACTS OBSERVED TO STATE LISTED FRESHWATER MUSSEL. FERC # 3180-000. INVESTIGATE	File #: 80 SEPT. 18, 1996 LETTER FROM US FISH & WILDLIFE SERVICE
PISCATAQUOG RIVER NHR70002120-00.0100 MANCHESTER	B	PS 1.00 <div>Overlapping Files: 198,305</div>	95-2PQG-1-1	PATHOGENS (E. COLI - WET WEATHER)	COMBINED SEWER OVERFLOWS (CSOs)	PS 1.50	MANCHESTER IS UNDER CONSENT ORDER TO IMPLEMENT PHASE 1 OF CSO FACILITY PLAN WHICH WILL ELIMINATE APPROXIMATELY 50% OF THE CSOS BY 2010.	File #: 81 PHASE II CSO FACILITIES PLAN BY CAMP, DRESSER & MCKEE, INC., MARCH 1993; 1996 MERRIMACK RIVER WATER QUALITY REPORT.
PISCATAQUOG RIVER NHR70002120-00.0100 MANCHESTER (NEAR SECOND STREET BRIDGE)	B	NS 0.50 <div>Overlapping Files: 81,198</div>	96-1A-PQG	HABITAT ALTERATIONS (BENTHIC DEPOSITS)	OTHER URBAN RUNOFF (HISTORIC DEPOSTION)	NS 1.00	INVESTIGATE SOURCE	File #: 305 DES BIOLOGY BUREAU'S BIOMONITORING PROGRAM
PURGATORY BROOK NHR70002170-00.0100 MILFORD (PURGATORY RD BRIDGE)	B	NS 1.00 <div>Overlapping Files: NONE</div>	99-1 PRG 3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED, CONDUCT FURTHER INVESTIGATIONS	File #: 466 1999 AMBIENT PROGRAM
SOUCOOK RIVER NHR70002060-00.0100 CONCORD (AROUND RTE 106 BRIDGE, UPSTREAM OF AIRPORT)	B	PS 1.00 <div>Overlapping Files: NONE</div>	94-2-Sck1-1	CADMIUM (CHRONIC EXCEEDANCE BASED ON GRAB SAMPLE)	UNKNOWN	PS 1.00	RESAMPLE	File #: 87 1996 MERRIMACK RIVER WQ REPORT

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			MERRIMACK RIVER BASIN					8 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
SOUCOOK RIVER NHR70002060-00.0100 CONCORD (RTE 9)	B	PS 1.00 <div>Overlapping Files: NONE</div>	99-3 SCK 1-1	COPPER	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 467 1999 AMBIENT PROGRAM
SOUCOOK RIVER NHR70002060-00.0100 LOUDON (STANIELS RD)	B	PS 1.00 <div>Overlapping Files: NONE</div>	99-4 SCK 1-1	COPPER	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS	File #: 468 1999 AMBIENT PROGRAM
SOUHEGAN RIVER NHR70002170-00.0100 GREENVILLE (AROUND RAILROAD CROSSING DOWNSTREAM OF PILGRIM FOODS.)	B	NS 1.00 <div>Overlapping Files: 304</div>	95-8SHG-3-1	pH	MINOR INDUSTRIAL POINT SOURCE (PILGRIM FOODS)	NS 1.00	EFFORTS TO RESOLVE pH VIOLATIONS ARE UNDERWAY AT PILGRIM FOODS. RESAMPLE AFTER WORK IS COMPLETED.	File #: 114 1996 DES DRAFT SOUHEGAN RIVER STUDY
SOUHEGAN RIVER NHR70002170-00.0100 GREENVILLE (AROUND RAILROAD CROSSING DOWNSTREAM OF PILGRIM FOODS.)	B	PS 1.00 <div>Overlapping Files: 114</div>	95-18B-SHG	HABITAT ALTERATIONS (BIOLOGICAL INTEGRITY / BENTHIC DEPOSITS)	(HIGHWAY / ROAD / BRIDGE RUNOFF	PS 1.00	INVESTIGATE SOURCE	File #: 304 DES BIOLOGY BUREAU'S BIOMONITORING PROGRAM
SOUHEGAN RIVER NHR70002170-00.0100 WILTON (AROUND RTE 101 CROSSING)	B	PS 1.00 <div>Overlapping Files: NONE</div>	95-15SHG-1-1 99-16 SHG 3-0	PATHOGENS (E. COLI - WET WEATHER)	UNKNOWN	PS 1.00	RESAMPLE 15- SHG	File #: 164 1996 MERRIMACK RIVER WATER QUALITY REPORT AND 1999 AMBIENT PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			MERRIMACK RIVER BASIN					9 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
SOUTH BRANCH PISCATAQUOG RIVER NHR70002110-00.0100 GOFFSTOWN (ABOUT 1.1 MILES UPSTREAM OF RTE 114/13 BRIDGE)	B	PS 1.00 <div>Overlapping Files: NONE</div>	96-6A-PQG	HABITAT ALTERATIONS (BIOLOGICAL INTEGRITY)	UNKNOWN	PS 1.00	INVESTIGATE SOURCE	File #: 306 DES BIOLOGY BUREAU'S BIOMONITORING PROGRAM
SQUAM RIVER NHR70001090-00.0100 ASHLAND (JUST BELOW THE RTE. 93 BRIDGE)	B	PS 1.00 <div>Overlapping Files: NONE</div>	SITE # 6 (1-SQM)	HABITAT ALTERATIONS	UNKNOWN	PS 1.00	INVESTIGATE SOURCE	File #: 261 MERRIMACK RIVER BI-STATE BIOMONITORING REPORT, NOVEMBER 1996
SUNCOOK RIVER NHR70002080-00.0100 SUNCOOK (1300 FOOT-LONG BYPASS REACH AT UNLICENSED CHINA MILL HYRDO)	B	PS 0.20 <div>Overlapping Files: NONE</div>	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 0.20	NO MINIMUM FLOW REQUIREMENT. FERC # 10900-000. INVESTIGATE	File #: 97 SEPTEMBER 18, 1996 LETTER FROM US FISH & WILDLIFE SERVICE
SUNCOOK RIVER NHR70002080-00.0100 SUNCOOK (1200 FOOT-LONG BYPASS REACH AT WEBSTER-PEMBROKE HYDRO)	B	PS 0.20 <div>Overlapping Files: NONE</div>	EVALUATED	LOW FLOW	HYDROMODIFICATION - FLOW REGULATION / MODIFICATION	PS 0.20	10CFS MINIMUM BYPASS FLOW TOO LOW (0.04 CSM). FERC # 03185-000. INVESTIGATE	File #: 96 SEPTEMBER 18, 1996 LETTER FROM US FISH & WILDLIFE SERVICE

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			MERRIMACK RIVER BASIN					10 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
WILLIAMS BROOK NHR70002020-00.0100 NORTHFIELD (FROM LANDFILL DOWNSTREAM TO THE CONFLUENCE WITH WINNIPESAUKEE RIVER)	B	PS 0.50 <div>Overlapping Files: NONE</div>	SW-3, 1993 & 1994	IRON	LANDFILLS - NORTHFIELD STUMP DUMP	PS 0.50	TMDL TO BE COMPLETED IN 2000, THE STUMP DUMP WAS CLOSED & CAPPED IN 1993. GROUNDWATER AND SURFACE WATER MONITORING IS CONTINUING UNDER A GROUNDWATER MANAGEMENT PERMIT ISSUED IN 1992 AND MODIFIED IN 1994. CONTINUE TO SAMPLE	File #: 98 SAMPLES TAKEN DOWNSTREAM OF LANDFILL IN 1993 & 1994 BY SWQB

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					1 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
BEARDS CREEK NHR60003120-03.0801 DURHAM (UPSTREAM OF COE DRIVE)	B	PS 0.50 <div>Overlapping Files: 88,176</div>	96-2BC-4-1	LEAD (WET WEATHER)	UNKNOWN	PS 0.50	RESAMPLE. INVESTIGATE SOURCE	File #: 171 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996
BEARDS CREEK NHR60003120-03.0801 DURHAM (UPSTREAM OF COE DRIVE)	B	 <div>Overlapping Files: 88,171</div>	96-1BC-4-1 96-2BC-4-1	ZINC (WET WEATHER)	UNKNOWN	PS 0.50	RESAMPLE. INVESTIGATE SOURCE	File #: 176 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996
BEARDS CREEK NHR60003120-03.0801 DURHAM (UPSTREAM OF COE DRIVE)	B	 <div>Overlapping Files: 171,176</div>	96-1BC-4-1 96-2BC-4-1	COPPER (WET WEATHER)	UNKNOWN	PS 0.50	RESAMPLE. INVESTIGATE SOURCE	File #: 88 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996
BEAUDETTE BROOK NHR60003120-03.0801 DURHAM (ROUTE 108 CROSSING SOUTH OF LAUREL LANE)	B	PS 0.50 <div>Overlapping Files: NONE</div>	96-1BH-4-1	PATHOGENS (E. COLI - WET WEATHER)	UNKNOWN	PS 0.50	RESAMPLE. INVESTIGATE SOURCE	File #: 167 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996.
BELLAMY RIVER NHR60003120-02.0701 DOVER	B	NS 1.00 <div>Overlapping Files: NONE</div>	97-PG1000-1-1 97-PG2000-1-1 98-PG1000-1-1 98-PG2000-1-1	PATHOGENS (E. COLI)	NATURAL SOURCES (LARGE PIGEON POPULATION)	NS 1.00	INVESTIGATE SOURCES	File #: 188 1997 NPS PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					2 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
BELLAMY RIVER NHR60003120-02.0701 DOVER	B	PS 1.00 <div>Overlapping Files: NONE</div>	98-8BLM-2-1	ZINC	UNKNOWN	PS 1.00	INVESTIGATE SOURCE	File #: 397 1998 AMBIENT PROGRAM
BRANCH RIVER NHR60003050-00.4001 WAKEFIELD	B	NS 1.00 <div>Overlapping Files: NONE</div>	98-7BRA-3-2	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 379 1998 AMBIENT PROGRAM
COBBY BROOK NHR60003110.00.0103 NEWFIELDS (UPSTREAM OF THE SQUAMSCOTT RIVER CONFLUENCE)	B	<div>Overlapping Files: 119,120,122</div>	95-EXW1-4-1	ALUMINUM (WET WEATHER)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE	File #: 121 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT
COBBY BROOK NHR60003110.00.0103 NEWFIELDS (UPSTREAM OF THE SQUAMSCOTT RIVER CONFLUENCE)	B	<div>Overlapping Files: 119,120,121</div>	95-EXW1-5-2	DISSOLVED OXYGEN (D.O.)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE	File #: 122 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT
COBBY BROOK NHR60003110-00.0103 NEWFIELDS (UPSTREAM OF THE SQUAMSCOTT RIVER CONFLUENCE)	B	NS 1.00 <div>Overlapping Files: 120,121,122</div>	95-EXW1-5-3	PATHOGENS (E. COLI - WET & DRY WEATHER)	UNKNOWN	NS 1.00	RESAMPLE. INVESTIGATE SOURCE	File #: 119 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					3 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
COBBY BROOK NHR60003110-00.0103 NEWFIELDS (UPSTREAM OF THE SQUAMSCOTT RIVER CONFLUENCE)	B	Overlapping Files: 119,121,122	95-EXW1-4-1	COPPER (WET WEATHER)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE	File #: 120 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT
COCHECO RIVER NHR60003090-00.0501 DOVER	B	NS 0.50 Overlapping Files: NONE	99-12CCCH-9-2	DISSOLVED OXYGEN (D.O.)	UNKNOWN	NS 0.50	CONDUCT FURTHER INVESTIGATIONS	File #: 372 1999 VRAP
COCHECO RIVER NHR60003090-00.0501 DOVER (DOWNSTREAM OF CENTRAL AVENUE)	B	NS 1.00 Overlapping Files: NONE	98-CRT8000-2-2 99-7CCH-8-1 99-7CCH-3-0 99-7CCH-1-0	PATHOGENS (E. COLI)	ILLICIT SEWER CONNECTIONS TO STORM DRAINS	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS	File #: 371 1998 NPS PROGRAM; 1999 VRAP; 1998-1999 AMBIENT PROGRAM
COCHECO RIVER NHR60003090-00.0501 ROCHESTER	B	Overlapping Files: 15	98-P52	BIOMONITORING /HABITAT ALTERATIONS	MAJOR MUNICIPAL POINT SOURCE (ROCHESTER WWTF)	PS 1.20	REASSESS AFTER NH BIOMONITORING CRITERIA IS DEVELOPED.	File #: 375 1998 BIOMONITORING PROGRAM
COCHECO RIVER NHR60003090-00.0501 ROCHESTER (DOWNSTREAM OF ROCHESTER WWTF TO THE ISINGLASS RIVER)	B	NS 1.20 Overlapping Files: NONE	93-15CCH-2-2 97-14ACCH-14-14	DISSOLVED OXYGEN (D.O.)	MAJOR MUNICIPAL POINT SOURCE (ROCHESTER WWTF)	NS 1.20	CITY IS CONSTRUCTION AWT WHICH IS EXPECTED TO BE OPERATIONAL IN NOVEMBER 2000.	File #: 15 1993 AMBIENT SAMPLING PROGRAM CONDUCTED BY SURFACE WATER QUALITY BUREAU

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					4 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
COCHECO RIVER NHR60003090-00.1901 FARMINGTON	B	NS 1.50 <div>Overlapping Files: 374</div>	99-23CCCH-10-1 99-26CCH-12-5	PATHOGENS (E. COLI)	UNKNOWN	NS 1.50	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS	File #: 373 1999 VRAP
COCHECO RIVER NHR60003090-00.1901 FARMINGTON	B	<div>Overlapping Files: 16,373</div>	98-P50	BIOMONITORING /HABITAT ALTERATIONS	UNKNOWN	PS 2.40	REASSESS AFTER NH BIOMONITORING CRITERIA IS DEVELOPED.	File #: 374 1998 BIOMONITORING PROGRAM
COCHECO RIVER NHR60003090-00.1901 FARMINGTON (FROM FARMINGTON TOWN LINE UPSTREAM TO RATTLESNAKE RIVER CONFLUENCE)	B	NS 3.00 <div>Overlapping Files: NONE</div>	90-22ACCH-9-7 91-22BCCH-12-11 99-22BCCH-9-6	DISSOLVED OXYGEN (D.O.)	LANDFILLS - FARMINGTON & CARDINAL LANDFILLS	NS 3.00	HYDROGEOLOGIC STUDIES & CONCEPTUAL CLOSURE PLANS FOR THE CARDINAL LANDFILL HAVE BEEN APPROVED . A PHASE 2 HYDROGEOLOGICAL INVESTIGATION FOR THE FARMINGTON LANDFILL IS CURRENTLY UNDER REVIEW. IT IS EXPECTED BOTH LANDFILLS WILL BE FORMALLY CLOSED BY THE YEAR 2003. RESAMPLE AFTER LANDFILLS HAVE BEEN CLOSED.	File #: 16 1990 & 1991 AMBIENT SURVEY; 1999 VRAP; 1999 AMBIENT PROGRAM
COCHECO RIVER NHR60003090-00.1901 ROCHESTER (FROM DAM JUST BELOW THE ROUTE 202A BRIDGE UPSTREAM)	B	NS 1.00 <div>Overlapping Files: NONE</div>	94-21CCH-1-1 99-21CCH-2-1	DISSOLVED OXYGEN (D.O.)	HYDROMODIFICATION - UPSTREAM IMPOUNDMENT	NS 1.00	INVESTIGATE SOURCES	File #: 123 1994 AMBIENT SURVEY; 1999 AMBIENT PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					5 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
COCHECO RIVER NHR60003090-00.1901 ROCHESTER (JUST DOWNSTREAM OF UNION ST. BRIDGE)	B	NS 1.00 <div>Overlapping Files: NONE</div>	97-RC2005-1-1 97-RC2010-1-1 98-610CCH-2-1 99-19CCH-9-4	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	CURRENTLY UNDER INVESTIGATION.	File #: 189 1997 NPS PROGRAM; 1998 NPS PROGRAM; 1999 VRAP
COLLEGE BROOK NHR60003120-03.0801 DURHAM (FROM THE OYSTER RIVER CONFLUENCE UPSTREAM.)	B	NS 1.00 <div>Overlapping Files: 170,174,180</div>	95-3COB-3-2 95-3ACOB-2-1 95-3BCOB-2-1 95-3CCOB-2-1 96-1CB-3-1 96-2-CB-3-1	PATHOGENS (E. COLI - WET & DRY WEATHER)	UNKNOWN	NS 1.00	RESAMPLE. INVESTIGATE SOURCE.	File #: 18 1995 AMBIENT SURVEY; OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996
COLLEGE BROOK NHR60003120-03.0801 DURHAM (FROM THE OYSTER RIVER CONFLUENCE UPSTREAM.)	B	<div>Overlapping Files: 18,174,180</div>	96-1CB-3-2 96-2CB-3-1	LEAD (WET WEATHER)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE.	File #: 170 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996
COLLEGE BROOK NHR60003120-03.0801 DURHAM (FROM THE OYSTER RIVER CONFLUENCE UPSTREAM.)	B	<div>Overlapping Files: 18,170,180</div>	96-1CB-3-2	ZINC (WET WEATHER)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE.	File #: 174 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN				6 8/24/00	
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
COLLEGE BROOK NHR60003120-03.0801 DURHAM (FROM THE OYSTER RIVER CONFLUENCE UPSTREAM.)	B	Overlapping Files: 18,170,174	96-1CB-4-2 96-2CB-4-1	COPPER (WET WEATHER)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE.	File #: 180 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996
CRICKET BROOK NHR60003090-00.0501 DOVER	B	NS 0.50 Overlapping Files: NONE	98-CA1000-1-1 98-CA2000-1-1 98-CBK20002-1-1 98-CBK2003-1-1 98-CBK250-1-1	PATHOGENS (E. COLI)	ILLICIT SEWER CONNECTIONS TO STORM DRAINS	NS 0.50	CONDUCT FURTHER INVESTIGATIONS	File #: 376 1998 NPS PROGRAM
DUDLEY BROOK NHR60003100-00.2450 RAYMOND	B	NS 1.00 Overlapping Files: 392	94-1DUD-1-1 95-1DUD-1-1	PATHOGENS (E. COLI)	AGRICULTURE - PASTURE GRAZING - FARM ANIMALS	NS 1.00	INVESTIGATE SOURCE.	File #: 109 1994, 1995 AND 1999 AMBIENT SURVEY
DUDLEY BROOK NHR60003100-00.2450 RAYMOND	B	Overlapping Files: 109	99-1DUD-1-1	DISSOLVED OXYGEN (D.O.)	UNKNOWN	PS 1.00	INVESTIGATE SOURCES	File #: 392 1999 AMBIENT PROGRAM
EXETER RIVER NHR60003110-00.2101 EXETER (AROUND GARY LANE)	B	Overlapping Files: 184	95-EXW8-5-3 98-9EXT-3-1 99-12EXT-3-0	DISSOLVED OXYGEN (D.O.)	UNKNOWN	PS 2.00	< 75% SAT. INVESTIGATE SOURCES.	File #: 128 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT. 1998 & 1999 AMBIENT PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					7 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
EXETER RIVER NHR60003110-00.2101 EXETER (AROUND RTE 111 CROSSING)	B	Overlapping Files: 124	95-EXW10-5-1	COPPER (WET WEATHER)	HIGHWAY / ROAD AND OR BRIDGE RUNOFF	PS 1.50	NO DRY WEATHER EXCEEDANCES IN 1998 OR 1999. CONDUCT BIOMONITORING.	File #: 125 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT. 1998 & 1999 AMBIENT PROGRAM
EXETER RIVER NHR60003110-00.2101 EXETER (RTE 108 BRIDGE - IMPOUNDMENT UPSTREAM OF TIDAL DAM))	B	NS 2.00 Overlapping Files: 128	95-9EXT-4-1 99-9EXT-3-0 98-12EXT-3-1 99-12EXT-3-0	PATHOGENS (E. COLI)	UNKNOWN	NS 2.00	IGEOMETRIC MEAN EXCEEDED. CONDUCT FURHTER INVESTIGATIONS.	File #: 184 1996 NONPOINT SOURCE REPORT. 1998 & 1999 AMBIENT PROGRAM.
EXETER RIVER NHR60003110-00.2101 SANDOWN	B	NS 1.00 Overlapping Files: NONE	99-30EXT-3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS	File #: 387 1999 AMBIENT PROGRAM
FORDWAY BROOK NHR60003110-00.2101 RAYMOND	B	NS 1.00 Overlapping Files: NONE	99-3FDY-3-3	DISSOLVED OXYGEN (D.O.)	UNKNOWN	NS 1.00	INVESTIGATE SOURCES	File #: 389 1999 AMBIENT PROGRAM
GREAT BROOK NHR60003110-00.2101 E. KINGSTON/KINGSTON (FROM RTE 150 CROSSING IN KINGSTON TO RTE 108 CROSSING IN E. KINGSTON SOUTH OF SANBORN ROAD.)	B	NS 4.00 Overlapping Files: 130,166	95-EXW11-5-4 95-GBR9-2-2 96-GBR2-2-1 97-GBR2-2-1 97-GBR9-2-2 97-GBR4-2-1 97-WSR1-1-1	PATHOGENS (E. COLI - WET & DRY WEATHER)	AGRICULTURE - CONFINED ANIMAL FEEDING OPERATIONS (NPS) - FARM ANIMALS	NS 4.00	RESAMPLE. INVESTIGATE SOURCE	File #: 187 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT; 1996 NONPOINT SOURCE COASTAL ASSESSMENT REPORT; 1997 DES COASTAL PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN				8 8/24/00	
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
GREAT BROOK NHR60003110-00.2101 KENSINGTON (AROUND THE RTE 108 CROSSING)	B	Overlapping Files: 187,166	95-EXW11-5-4	ALUMINUM (WET AND DRY WEATHER)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE	File #: 130 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT
GREAT BROOK NHR60003110-00.2101 KENSINGTON (AROUND THE RTE 108 CROSSING)	B	Overlapping Files: 130,187	95-EXW11-5-4	DISSOLVED OXYGEN (D.O.)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE.	File #: 166 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT.
GREAT MEADOWS BROOK NHR60003110-00.2101 KENSINGTON (AROUND RTE 150)	B	NS 1.00 Overlapping Files: 390	99-1GMB-3-0	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS	File #: 388 1999 AMBIENT PROGRAM
GREAT MEADOWS BROOK NHR60003110-00.2101 KENSINGTON (AROUND RTE 150)	B	Overlapping Files: 388	99-1GMB-3-2	DISSOLVED OXYGEN (D.O.)	UNKNOWN	NS 1.00	INVESTIGATE SOURCES	File #: 390 1999 AMBIENT PROGRAM
HEATH BOG CREEK NHR60003090-00.1901 ROCHESTER (NEAR SPAULDING HIGH SCHOOL)	B	NS 0.10 Overlapping Files: NONE	99-1HB-2-1	PATHOGENS (E. COLI)	UNKNOWN	NS 0.10	INVESTIGATE SOURCE	File #: 385 1998 NPS PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					9 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
LAMPREY RIVER NHR60003100-00.0301 EPPING (FROM WWTF DOWNSTREAM TO WADLEIGH FALLS DAM)	B	PS 1.50 <div>Overlapping Files: 48, 135, 337</div>	EVALUATED	NUTRIENTS - PHOSPHORUS - EXCESSIVE ALGAL BLOOMS	MAJOR MUNICIPAL POINT SOURCE (EPPING WWTF)	PS 5.00	A TMDL OF THE LAMPREY RIVER HAS BEEN COMPLETED. PERMIT WITH AWT LIMITS TO BE ISSUED IN 2000 WITH CONSTRUCTION OF AWT ANTICIPATED TO BEGIN IN 2001.	File #: 339 1995 LAMPREY RIVER TMDL BY SURFACE WATER QUALITY BUREAU
LAMPREY RIVER NHR60003100-00.0301 EPPING (AROUND WWTF)	B	NS 1.50 <div>Overlapping Files: 48,339</div>	98-12ALMP-2-1 98-12BLMP-2-1 98-13'LMP-2-1	PATHOGENS (E.COLI)	UNKNOWN	NS 1.50	CONDUCT FURTHER INVESTIGATIONS	File #: 377 1998 VRAP
LAMPREY RIVER NHR60003100-00.0301 EPPING (HEDDING ROAD)	B	PS 1.50 <div>Overlapping Files: 339, 337</div>	95-12LMP-5-3	DISSOLVED OXYGEN (D.O.)	MAJOR MUNICIPAL POINT SOURCE (EPPING WWTF)	PS 2.50	A TMDL OF THE LAMPREY RIVER HAS BEEN COMPLETED. PERMIT WITH AWT LIMITS TO BE ISSUED IN 2000 WITH CONSTRUCTION OF AWT ANTICIPATED TO BEGIN IN 2001.	File #: 48 1995 LAMPREY RIVER TMDL BY SURFACE WATER QUALITY BUREAU
LAMPREY RIVER NHR60003100-00.0301 LEE (AROUND THE LEE HOOK RD CROSSING)	B	NS 1.00 <div>Overlapping Files: NONE</div>	93-8CLMP-8-1	PATHOGENS (E. COLI - WET WEATHER)	UNKNOWN	NS 1.00	RESAMPLE	File #: 136 FY92 104(b)(3) PROJECT LAMPREY RIVER WATERSHED
LAMPREY RIVER NHR60003100-00.0301 NEWMARKET (FROM TIDAL DAM UPSTREAM TO DURHAM/ NEW MARKET TOWN LINE)	B	 <div>Overlapping Files: 137</div>	93-5LMP-7-3	ZINC (WET WEATHER)	UNKNOWN	PS 1.00	NO DRY WEATHER EXCEEDANCES IN 1998 OR 1999. CONDUCT BIOMONITORING	File #: 138 FY92 104(b)(3) PROJECT LAMPREY RIVER WATERSHED

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					10 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
LAMPREY RIVER NHR60003100-00.2450 DEERFIELD (UPSTREAM OF THE HARTFORD BROOK CONFLUENCE)	B	PS 2.00 Overlapping Files: NONE	93-24ALMP-8-2 93-24BLMP-9-1	PATHOGENS (E. COLI - WET WEATHER)	UNKNOWN	PS 2.00	RESAMPLE	File #: 131 FY92 104(b)(3) PROJECT LAMPREY RIVER WATERSHED
LAMPREY RIVER NHR60003100-00.2450 EPPING (AROUND THE RTE 125 BRIDGE)	B	Overlapping Files: 133	93-14LMP-7-1	ZINC (WET WEATHER)	UNKNOWN	PS 1.00	NO DRY WEATHER EXCEEDANCES IN 1998 OR 1999. CONDUCT BIOMONITORING	File #: 134 FY92 104(b)(3) PROJECT LAMPREY RIVER WATERSHED
LAMPREY RIVER NHR60003100-00.2450 RAYMOND (BETWEEN EPPING RD AND LANFORD RD)	B	PS 2.00 Overlapping Files: NONE	93-19LMP-9-3 93-21LMP-9-3	ZINC (WET WEATHER)	UNKNOWN	PS 2.00	NO DRY WEATHER EXCEEDANCES IN 1998 OR 1999. CONDUCT BIOMONITORING	File #: 132 FY92 104(b)(3) PROJECT LAMPREY RIVER WATERSHED
LITTLE RIVER NHR60003100-00.0301 LEE (TUTTLE AND CARTLAND RD)	B	NS 2.00 Overlapping Files: NONE	98-1LTR-4-1 99-2LTR-1-1	DISSOLVED OXYGEN (D.O.)	UNKNOWN	NS 1.00	INVESTIGATE SOURCE.	File #: 395 1998 & 1999 AMBIENT PROGRAM
LITTLE RIVER NHR60003110-23.0100 EXETER (AROUND GARRISON LANE)	B	NS 1.00 Overlapping Files: 140,141	95-EXW5-5-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	RESAMPLE. INVESTIGATE SOURCE.	File #: 139 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					11 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
LITTLE RIVER NHR60003110-23.0100 EXETER (AROUND GARRISON LANE)	B	Overlapping Files: 139,141	95-EXW5-5-1	COPPER (WET WEATHER)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE.	File #: 140 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT
LITTLE RIVER NHR60003110-23.0100 EXETER (AROUND GARRISON LANE)	B	Overlapping Files: 139,140	95-EXW5-5-1	DISSOLVED OXYGEN (D.O.)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE.	File #: 141 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT
LOWER GRAFTON BROOK NHR60003146-00.0103 PORTSMOUTH	B	PS 0.50 Overlapping Files: NONE	MONITORED	METALS - ALUMINUM / ARSENIC/ IRON/ COPPER/ LEAD / MANGANESE/ ZINC	INDUSTRIAL POINT SOURCES (PEASE AIR FORCE BASE)	PS 0.50	REMOVAL OF CONTAMINATED SOILS UPSTREAM WAS COMPLETED IN 1997. STREAM RESTORATION PROJECT WAS COMPLETED IN 1997. US AIR FORCE WILL CONTINUE TO MONITOR.	File #: 54 1994 SURFACE WATER DRAINAGE REPORT BY WESTON
LOWER NEWFIELDS BROOK NHR60003146-00.0103 NEWINGTON/ PORTSMOUTH	B	PS 0.50 Overlapping Files: NONE	MONITORED	MANGANESE	INDUSTRIAL POINT SOURCES (PEASE AIR FORCE BASE)	PS 0.50	REMOVAL OF CONTAMINATED SOILS UPSTREAM WAS COMPLETED IN 1997. STREAM RESTORATION PROJECT WAS COMPLETED IN 1997. US AIR FORCE WILL CONTINUE TO MONITOR.	File #: 55 1994 SURFACE WATER DRAINAGE REPORT BY WESTON
MCINTYRE BROOK NHR60003146-00.0103 NEWINGTON/ PORTSMOUTH	B	PS 1.00 Overlapping Files: NONE	MONITORED	MANGANESE	AIRPORT RUNOFF - PEASE AIR FORCE BASE	PS 1.00	REMOVAL OF CONTAMINATED SOILS UPSTREAM WAS COMPLETED IN 1997. STREAM RESTORATION PROJECT WAS COMPLETED IN 1997. US AIR FORCE WILL CONTINUE TO MONITOR.	File #: 59 1994 SURFACE WATER DRAINAGE REPORT BY WESTON

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					12 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
MOONLIGHT BROOK NHR60003100-00.0103 NEWMARKET	B	NS 0.30 <div>Overlapping Files: 144,145</div>	94-1MLT-3-2 93-1MLT-9-7	PATHOGENS (E. COLI - WET & DRY WEATHER)	ILLICIT SEWER CONNECTIONS TO STORM DRAINS	NS 0.30	EPA HAS ISSUED AN A.O. THAT REQUIRED THE TOWN TO SUBMIT A PLAN TO ELIMINATE DRY WEATHER DISCHARGES BY JANUARY 16, 1998. TOWN HAS ELIMINATED 4 ILLICIT CONNECTIONS. RESAMPLE.	File #: 255 FY92 104(B)(3) PROJECT - LAMPREY RIVER WATERSHED; 1993 AND 1994 AMBIENT SURVEY
MOONLIGHT BROOK NHR60003100-00.0103 NEWMARKET (FROM EXETER ST UPSTREAM TO MAPLE AVE)	B	<div>Overlapping Files: 145,255</div>	93-IMLT-9-4 93-3MLT-9-3	ZINC (WET WEATHER)	ILLICIT SEWER CONNECTIONS TO STORM DRAINS	PS 0.30	EPA HAS ISSUED AN A.O. THAT REQUIRED THE TOWN TO SUBMIT A PLAN TO ELIMINATE DRY WEATHER DISCHARGES BY JANUARY 16, 1998. TOWN HAS ELIMINATED 4 ILLICIT CONNECTIONS. RESAMPLE.	File #: 144 FY92 104(b)(3) PROJECT LAMPREY RIVER WATERSHED
MOONLIGHT BROOK NHR60003100-00.0103 NEWMARKET (FROM EXETER ST UPSTREAM TO MAPLE AVE)	B	<div>Overlapping Files: 144,255</div>	93-1MLT-9-2 93-3MLT-9-2	COPPER (WET WEATHER)	ILLICIT SEWER CONNECTIONS TO STORM DRAINS	PS 0.30	EPA HAS ISSUED AN A.O. THAT REQUIRED THE TOWN TO SUBMIT A PLAN TO ELIMINATE DRY WEATHER DISCHARGES BY JANUARY 16, 1998. TOWN HAS ELIMINATED 4 ILLICIT CONNECTIONS. RESAMPLE.	File #: 145 FY92 104(b)(3) PROJECT LAMPREY RIVER WATERSHED
NORTH BRANCH RIVER NHR60003100-00.2450 CANDIA (AROUND NEW BOSTON ROAD)	B	<div>Overlapping Files: 147</div>	93-3NBR-9-1	COPPER (WET WEATHER)	UNKNOWN	PS 1.00	RESAMPLE OR CONDUCT BIOMONITORING TO DETERMINE IF THERE IS ANY IMPACT ON AQUATIC ORGANISMS.	File #: 146 FY92 104(b)(3) PROJECT LAMPREY RIVER WATERSHED
NORTH BRANCH RIVER NHR60003100-00.2450 CANDIA (AROUND NEW BOSTON ROAD)	B	PS 1.00 <div>Overlapping Files: 146</div>	93-3NBR-9-3	ZINC (WET WEATHER)	UNKNOWN	PS 1.00	RESAMPLE OR CONDUCT BIOMONITORING TO DETERMINE IF THERE IS ANY IMPACT ON AQUATIC ORGANISMS.	File #: 147 FY92 104(b)(3) PROJECT LAMPREY RIVER WATERSHED

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					13 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
OYSTER RIVER NHR60003120-03.0801 DURHAM	B	Overlapping Files: 169, 178, 398	96-1OR-4-1 96-3OR-4-1	COPPER (WET WEATHER)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE. NO DRY WEATHER EXCEEDANCES IN 1998.	File #: 182 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996. 1998 AMBIENT PROGRAM
OYSTER RIVER NHR60003120-03.0801 DURHAM	B	Overlapping Files: 169,178,182	98-P33-1-1	BOMONITORING CRITERIA/ HABITAT	URBAN RUNOFF	PS 2.00	REASSESS AFTER NH DEVELOPS NUMERIC BIOCRITERIA.	File #: 398 1998 BIOMONITORING PROGRAM
OYSTER RIVER NHR60003120-03.0801 LEE	B	PS 1.00 Overlapping Files: 169, 182, 398	96-3OR-4-1 98-8OYST-2-1	ZINC (WET & DRY WEATHER)	UNKNOWN	PS 2.00	RESAMPLE. INVESTIGATE SOURCE	File #: 178 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996. 1998 AMBIENT PROGRAM
OYSTER RIVER NHR60003120-03.1001 DURHAM	A	NS 2.00 Overlapping Files: 169, 178, 182, 398	96-5OR-5-1 98-6OYST-3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 2.00	GEOMETRIC MEAN EXCEEDED. INVESTIGATE SOURCE.	File #: 169 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996. 1998 AMBIENT PROGRAM
PAGE BROOK NHR60003050-00.0901 ROCHESTER (NEAR SALMON FALLS ROAD)	B	NS 0.50 Overlapping Files: NONE	99-JM100-1-1 99-JM200-1-1	PATHOGENS (E. COLI)	UNKNOWN	NS 0.50	INVESTIGATE SOURCE	File #: 378 1999 NPS PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					14 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
PAULS BROOK NHR60003120-00.0103 NEWINGTON	B	NS 0.50 Overlapping Files: NONE	MONITORED	PRIORITY ORGANICS - FUEL OIL	INDUSTRIAL POINT SOURCES (PEASE AIR FORCE BASE - JET FUEL PUMP HOUSE)	NS 0.50	REMEDATION PLAN WAS COMPLETED IN 1997.U.S. AIR FORCE WILL CONTINUE TO MONITOR	File #: 72 1994 SURFACE WATER DRAINAGE REPORT BY WESTON
PAWTUCKAWAY RIVER NHR60003100-00.2450 EPPING	B	NS 1.00 Overlapping Files: 394	98-1PAR-1-1	DISSOLVED OXYGEN (D.O.)	UNKNOWN	NS 1.00	INVESTIGATE SOURCES	File #: 393 1998 AMBIENT PROGRAM
PETTEE (RESERVOIR BROOK) NHR60003120-03.0801 DURHAM	B	 Overlapping Files: 115,175,179	96-1RB-4-2	LEAD (WET WEATHER)	UNKNOWN	PS 0.80	RESAMPLE. INVESTIGATE SOURCE.	File #: 172 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996
PETTEE (RESERVOIR) BROOK NHR60003120-03.0801 DURHAM	B	PS 0.80 Overlapping Files: 172,175,179	96-1RB-5-3 96-2RB-5-1 96-3RB-5-0 98-PBWC1-1-0	PATHOGENS (E. COLI - WET WEATHER)	UNKNOWN	PS 0.80	RESAMPLE. INVESTIGATE SOURCE.	File #: 115 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996. 1998 NPS PROGRAM.
PETTEE (RESERVOIR) BROOK NHR60003120-03.0801 DURHAM	B	 Overlapping Files: 115,172,179	96-1RB-4-3 96-1RB-4-2	ZINC (WET WEATHER)	UNKNOWN	PS 0.80	RESAMPLE. INVESTIGATE SOURCE.	File #: 175 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996
PETTEE (RESERVOIR) BROOK NHR60003120-03.0801 DURHAM	B	 Overlapping Files: 115,172,175	96-1RB-4-3 96-2RB-4-3	COPPER (WET WEATHER)	UNKNOWN	PS 0.80	RESAMPLE. INVESTIGATE SOURCE.	File #: 179 OYSTER RIVER WATERSHED NONPOINT POLLUTION CONTROL PROJECT, AUGUST 1996

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams

PISCATAQUA RIVER BASIN

15
8/24/00

Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
PEVERLY BROOK NHR60003120-00.0103 NEWINGTON	B	PS 1.00 <div>Overlapping Files: NONE</div>	MONITORED	METALS - ARSENIC/ CADMIUM/ MANGANESE/ ZINC	LANDFILLS - PEASE AIR FORCE BASE LANDFILL	PS 1.00	CONSTRUCTION RUBBLE DUMP NO. 1 COMPLETED. LANDFILL NO.1 RESLOPED TO PREVENT PONDING. USAF TO PROVIDE DES WITH SUMMARY OF MORE RECENT DATA COLLECTED AFTER 1994. CONTAMINATION OF PAST SAMPLING DATA SUSPECTED AND SAMPLING TO BE REPEATED AS PART OF LONG TERM MONITORING PLAN.	File #: 75 1994 SURFACE WATER DRAINAGE REPORT BY WESTON
PICKERING BROOK NHR60003120-00.0103 NEWINGTON	B	PS 1.00 <div>Overlapping Files: NONE</div>	MONITORED	METALS - ARSENIC/ COPPER/ LEAD/ ZINC/ MANGANESE/ ALUMINUM / BERYLLIUM/ IRON	INDUSTRIAL POINT SOURCE (PEASE AIR FORCE BASE - FIRE DEPT TRAINING AREA NUMBER 2 (SITE B)	PS 1.10	ONGOING REMEDIATION OF FIRE DEPT. TRAINING AREA NUMBER 2 - USAF WILL CONTINUE LONG TERM MONITORING.	File #: 77 1994 SURFACE WATER DRAINAGE REPORT BY WESTON
PICKERING BROOK NHR60003146-00.0103 GREENLAND	B	PS 1.00 <div>Overlapping Files: NONE</div>	MONITORED	METALS - ARSENIC/ CADMIUM/ LEAD/ ZINC/ COPPER	INDUSTRIAL POINT SOURCES (GTE , NOVEL IRON WORKS, TRAVEL PORT TRUCK STOP)	PS 1.00	PROBABLE SOURCES LISTED ARE LOCATED ADJACENT TO PACKER BOG AND GREAT BOG WHICH ARE HEADWATERS FOR PICKERING BROOK. EPA ISSUED AO TO NOVEL IRON WORKS IN OCT. 1997 FOR FAILURE TO IMPLEMENT STORMWATER POLLUTION PREVENTION PLAN. TRAVEL PORT TRUCK STOP WILL TIE THEIR SEPTIC SYSTEM INTO PORTSMOUTH'S SEWER AS A RESULT OF A DES ENFORCEMENT ACTION. INVESTIGATE GTE AND CONTINUE SAMPLING OF BROOK.	File #: 78 FEBRUARY 1993, US AIR FORCE BACKGROUND LETTER REPORT

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams				PISCATAQUA RIVER BASIN			16 8/24/00		
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source	
PIKE BROOK NHR60003050-00.4001 BROOKFIELD	B	NS 1.00 <div>Overlapping Files: NONE</div>	98-1PKB-3-2	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 380 1998 AMBIENT PROGRAM	
PIKE BROOK NHR60003050-00.4001 BROOKFIELD	B	PS 1.00 <div>Overlapping Files: NONE</div>	98-2PKB-3-2	DISSOLVED OXYGEN (D.O.)	UNKNOWN	PS 1.00	< 75% SAT. INVESTIGATE SOURCE	File #: 382 1998 AMBIENT PROGRAM	
PISCASSIC RIVER NHR60003100-02.0201 NEWMARKET (RTE 152 BRIDGE)	A	NS 1.00 <div>Overlapping Files: NONE</div>	98-2PIS-3-1	DISSOLVED OXYGEN (D.O.)	UNKNOWN	NS 1.00	INVESTIGATE SOURCE.	File #: 396 1998 AMBIENT PROGRAM	
SALMON FALLS RIVER NHR60003050-00.0901 ROLLINSFORD (AT ROLLINSFORD DAM)	B	<div>Overlapping Files: 338 , 381</div>	95-SF11-8-1	DISSOLVED OXYGEN (D.O.)	UNKNOWN	PS 1.00	TMDL COMPLETED IN 1999. PERMITS WITH AWT TO BE ISSUED.	File #: 85 MAINE'S TMDL STUDY SALMON FALLS RIVER	
SALMON FALLS RIVER NHR60003050-00.0901 ROLLINSFORD (AT ROLLINSFORD DAM)	B	<div>Overlapping Files: 85 , 381</div>	EVALUATED	NUTRIENTS - PHOSPHORUS - EXCESSIVE ALGAL BLOOMS	UNKNOWN	PS 1.00	TMDL COMPLETED IN 1999. PERMITS WITH AWT (INCLUDING TP REMOVAL) TO BE ISSUED.	File #: 338 MAINE'S TMDL STUDY SALMON FALLS RIVER	
SALMON FALLS RIVER NHR60003050-00.0901 SOMERSWORTH	B	NS 1.00 <div>Overlapping Files: NONE</div>	97-SW3000-1-1 97-SW6950-1-1 97-SW7000-2-2	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	NEEDS FURTHER INVESTIGATION; CANOE REQUIRED.	File #: 197 1997NPS PROGRAM	

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams				PISCATAQUA RIVER BASIN				17 8/24/00	
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source	
SALMON FALLS RIVER NHR60003050-00.0901 SOMERSWORTH (AROUND THE GE BUILDING)	B	NS 1.00 <div>Overlapping Files: NONE</div>	98-SF1000-1-1 98-SW1000-1-1 98-SW7003-1-1 98-SW7004-1-1 98-SW7005-2-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	INVESTIGATE SOURCE	File #: 383 1998 NPS PROGRAM	
SALMON FALLS RIVER NHR60003050-00.0901 SOMERSWORTH / ROLLINSFORD	B	NS 3.00 <div>Overlapping Files: 85,338</div>	98-5SFR-3-1 98-6SFR-3-2 98-8SFR-3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 3.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 381 1998 AMBIENT PROGRAM	
UNNAMED TRIBUTARY B TO SQUAMSCOTT RIVER NHR60003110.00-0103 STRATHAM	B	NS 0.20 <div>Overlapping Files: NONE</div>	99-SF100-1-1 98-ST51-1-1 98-ST5100-1-1	PATHOGENS (E. COLI)	AGRICULTURE - CONFINED ANIMAL FEEDING OPERATIONS (NPS) - STUART FARM (MILK ROOM/ MANURE PIT DRAINAGE SWALE)	NS 0.20	BMPS ARE BEING CONSTRUCTED. CONTINUE MONITORING.	File #: 391 1998 & 1999 NPS PROGRAM	
UNNAMED TRIBUTARY A TO SQUAMSCOTT RIVER NHR60003110.00-0103 STRATHAM	B	NS 0.30 <div>Overlapping Files: NONE</div>	92-SF2-5-5 92-SF3-3-3 92-SF4-5-5 92-SF5-1-1 92-SF6-6-5	PATHOGENS (E. COLI)	AGRICULTURE - CONFINED ANIMAL FEEDING OPERATIONS (NPS) - STUART FARM (MILK ROOM/ MANURE PIT DRAINAGE SWALE)	NS 0.30	DETENTION / CONSTRUCTED WETLAND BMP WAS INSTALLED IN 1993. SINCE THAT TIME THERE HAS BEEN NO DISCHARGE. SAMPLE WHEN DISCHARGE OCCURS.	File #: 148 FY91-319 PROJECT	
UNNAMED TRIBUTARY TO OYSTER RIVER (FROM THE LEE TRAFFIC CIRCLE) NHR60003120-03.1001 NOTTINGHAM (BY ROUTE 4, 125 TRAFFIC CIRCLE)	A	PS 1.00 <div>Overlapping Files: NONE</div>	96-13B-OR-4-1	ZINC (WET WEATHER)	UNKNOWN	PS 1.00	RESAMPLE. INVESTIGATE SOURCE	File #: 177 78,175,179,75,77	

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					18 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
UNNAMED TRIBUTARY TO SQUAMSCOTT RIVER NHR60003110-00.0103 STRATHAM (WEST OF FRYING PAN LANE)	B	NS 1.00 Overlapping Files: NONE	EVALUATED	PATHOGENS	AGRICULTURE - CONFINED ANIMAL FEEDING OPERATIONS (NPS) - SCAMMAN DAIRY FARM - MANURE	NS 1.00	INVESTIGATE TO DETERMINE IF BMPs WERE IMPLEMENTED. IF SO, RESAMPLE.	File #: 117 FEB. 18, 1997 FROM DEPT OF AGRICULTURE TO SCAMMAN DAIRY FARM.
UNNAMED TRIBUTARY TO THE COCHECO RIVER NHR60003090-00.0501 DOVER (UPSTREAM OF ATLANTIC AVE.	B	NS 0.40 Overlapping Files: NONE	97-PA1010-1-1 98-CRT910-1-1	PATHOGENS (E. COLI)	UNKNOWN	NS 0.40	RESAMPLE TO VERIFY.	File #: 253 1997 & 1998 NPS PROGRAM
VARNEY BROOK NHR60003120-02.0103 DOVER	B	NS 0.80 Overlapping Files: NONE	97-VB2990-2-2 97-VB3000-3-2 97-VB3010-2-2 97-VB3030-2-1 97-VB3060-2-2 97-VB3070-2-2 97-VB3050-2-2 98-VB3005-1-1 98-VB-3050-1-1	PATHOGENS (E. COLI)	UNKNOWN	NS 0.80	FURTHER SAMPLING AND INVESTIGATION IS REQUIRED.	File #: 196 1997 & 1998 NPS PROGRAM
WHEELWRIGHT CREEK NHR60003110-00.0103 EXETER (UPSTREAM OF THE SQUAMSCOTT RIVER CONFLUENCE)	B	Overlapping Files: 151,152,185	95-EXW2-5-3	COPPER (WET WEATHER)	URBAN RUNOFF/ STORM SEWERS	PS 0.50	RESAMPLE. INVESTIGATE SOURCE.	File #: 150 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					19 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
WHEELWRIGHT CREEK NHR60003110-00.0103 EXETER (UPSTREAM OF THE SQUAMSCOTT RIVER CONFLUENCE)	B	Overlapping Files: 150,152,185	95-EXW2-5-3	ZINC (WET WEATHER)	URBAN RUNOFF/ STORM SEWERS	PS 0.50	RESAMPLE. INVESTIGATE SOURCE.	File #: 151 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT
WHEELWRIGHT CREEK NHR60003110-00.0103 EXETER (UPSTREAM OF THE SQUAMSCOTT RIVER CONFLUENCE)	B	Overlapping Files: 150,151,185	95-EXW2-5-3	ALUMINUM (WET WEATHER)	URBAN RUNOFF/ STORM SEWERS	PS 0.50	RESAMPLE. INVESTIGATE SOURCE.	File #: 152 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT
WHEELWRIGHT CREEK NHR60003110-00.0103 EXETER (UPSTREAM OF THE SQUAMSCOTT RIVER CONFLUENCE)	B	NS 0.50 Overlapping Files: 150,151,152	95-EXW2-4-3 95-WB4-1-1 97-WB1-1-1 97-WB4-1-1	PATHOGENS (E. COLI - WET & DRY WEATHER)	UNKNOWN	NS 0.50	RESAMPLE. INVESTIGATE SOURCE.	File #: 185 1995 OSP EXETER/ SQUAMSCOTT, NONPOINT POLLUTION CONTROL PROJECT; 1996 NONPOINT SOURCE COASTAL ASSESSMENT REPORT; 1997 DES NPS PROGRAM.

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			PISCATAQUA RIVER BASIN					20 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source
WILLOW BROOK NHR60003090-00.0501 ROCHESTER (FROM THE CONFLUENCE WITH WARDLEYBROOK UPSTREAM)	B	NS 0.50 <div>Overlapping Files: NONE</div>	93-000-3-3 94-2WLB-4-2 94-1WLB-3-1 94-OAWLB-3-2 94-OA'WLB-1-1 94-OEWLB-2-1 94-OE'WLB-2-1 94-OE'WLB-2-2 94-OGWLB-1-1 95-3WLB-1-1 95-OEWLB-1-1 97-1WIL-1-1 97-2WIL-1-0	PATHOGENS (E. COLI)	ILLICIT SEWER CONNECTIONS TO STORM DRAINS	NS 0.50	IN NOV 1997 THE CITY OF ROCHESTER INFORMED DES THAT THEY FOUND TOILET PAPER IN STORM DRAIN BY WESTON AVE. THE CITY RETAINED HTA TO PROVIDE SCOPE OF SERVICES BY 12/19/97 TO LOCATE CROSS CONNECTIONS. SEWERS FROM 2 HOUSES ARE CONNECTED TO THE DRAIN. THE CITY EXPECTS TO ELIMINATE THE CROSS CONNECTIONS IN 2000.	File #: 99 1993 DES COMPLAINT FILE; 1994, 1995, 1996 AND 1997 AMBIENT SURVEYS; 12/1/97 LETTER FROM CITY OF ROCHESTER.
YORK BROOK NHR60003110-00.2101 E. KINGSTON (TRIB. TO GREAT BROOK)	B	PS 0.50 <div>Overlapping Files: NONE</div>	97-YB1-2-1	PATHOGENS (E. COLI - WET WEATHER)	UNKNOWN	PS 0.50	RESAMPLE	File #: 195 1997 COASTAL PROGRAM

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			SACO RIVER BASIN				1 8/24/00		
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source	
EAST BRANCH SACO RIVER NHR60002010-00-0100 LOWER BARTLETT (RTE 16/302 BRIDGE)	B	NS 1.00 <div>Overlapping Files: 401,402,403</div>	98-2 Ebs 3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 400 1998 AMBIENT PROGRAM	
EAST BRANCH SACO RIVER NHR60002010-00-0100 LOWER BARTLETT (RTE 16/302 BRIDGE)	B	<div>Overlapping Files: 400,402,403</div>	98-2 Ebs 2-1	ALUMINUM	UNKNOWN	PS 1.00	CONDUCT FURTHER INVESTIGATIONS.	File #: 401 1998 AMBIENT PROGRAM	
ELLIS RIVER NHR60002010-00-0100 BARTLETT (RTE 16/302 BRIDGE)	B	NS 1.00 <div>Overlapping Files: 405, 406</div>	98-1 Ell 3-2	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 404 1998 AMBIENT PROGRAM	
SACO RIVER NHR60002030-00.0100 CONWAY (WASHINGTON ST. COVERED BRIDGE)	B	NS 1.00 <div>Overlapping Files: 408</div>	98-4 SAC 3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 407 1998 AMBIENT PROGRAM	
SACO RIVER NHR60002030-00.0100 NORTH CONWAY (RIVER RD. BRIDGE)	B	NS 1.00 <div>Overlapping Files: 410</div>	98-7 SAC 3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	CONDUCT FURTHER INVESTIGATIONS.	File #: 409 1998 AMBIENT PROGRAM	

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

1998 305(b) List for NH Rivers and Streams			SACO RIVER BASIN				2 8/24/00		
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source	
SWIFT RIVER NHR60002020-00.0100 ALBANY (BEAR NOTCH RD BRIDGE)	B	NS 1.00 <div>Overlapping Files: 418,419,420</div>	98-5 SWF 3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 417 1998 AMBIENT PROGRAM	
SWIFT RIVER NHR60002020-00.0100 ALBANY (COVERED BRIDGE)	B	NS 1.00 <div>Overlapping Files: 415, 416</div>	98-4 SWF 3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 414 1998 AMBIENT PROGRAM	
SWIFT RIVER NHR60002020-00.0100 CONWAY (W.SIDE DR. COVERED BRIDGE)	B	NS 1.00 <div>Overlapping Files: 413</div>	98-1 SWF 3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 412 1998 AMBIENT PROGRAM	
WILDCAT BROOK NHR60002010-00-0100 JACKSON (RTE 16A BRIDGE)	B	NS 1.00 <div>Overlapping Files: 422,423</div>	98-1 WLD 3-1	PATHOGENS (E. COLI)	UNKNOWN	NS 1.00	GEOMETRIC MEAN EXCEEDED. CONDUCT FURTHER INVESTIGATIONS.	File #: 421 1998 AMBIENT PROGRAM	

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

***305(b) LIST
FOR
LAKES AND PONDS***

NHDES 2000 305(b) Report
Swimming Use Support
NH Lakes that do not fully support the Swimming Use

<u>Lake</u>	<u>Town</u>	<u>Impaired Area (ac)</u>	<u>Use</u>	<u>Cause</u>	<u>Source</u>
ARLINGTON MILL RESERVOIR	SALEM	30.0	P	2600	8950
BABOOSIC LAKE	AMHERST	222.0	P	2210	9000
BROAD BAY	OSSIPEE	3.0	P	2600	8950
CAPTAIN POND	SALEM	51.0	P	2600	8950
CATAMOUNT POND	ALLENSTOWN	0.2	P	1700	8700
CHESHIRE POND	JAFFREY	15.0	P	2600	8950
COBBETTS POND, STN 1	WINDHAM	6.0	P	2600	8950
CONTOOCOOK LAKE	JAFFREY	35.0	P	2600	8950
CRESCENT LAKE	WOLFEBORO	1.0	P	2600	8950
CRYSTAL LAKE	MANCHESTER	18.6	T	0	0
DORRS POND	MANCHESTER	17.6	P	1700	4300
FLINTS POND	HOLLIS	20.0	P	2600	8950
FOREST LAKE	WINCHESTER	0.2	P	2600	8950
FRENCH POND	HENNIKER	41.5	T	0	0
GREAT POND	KINGSTON	0.2	P	1700	8700
ISLAND POND	DERRY	50.0	P	2600	8950
KEYSER POND	HENNIKER	19.8	P	2210	9000
LEES POND	MOULTONBORO	10.0	P	2600	8950
LOCKE LAKE	BARNSTEAD	25.0	P	2600	8950
MASCOMA LAKE, STN 1	ENFIELD	0.2	P	2600	8950
MASSABESIC LAKE, STN 1	AUBURN	3.0	P	2600	8950
MASSASECUM, LAKE	BRADFORD	4.0	P	2600	8950
MINE FALLS POND	NASHUA	18.7	P	2200	9000
MONOMONAC, LAKE, STN A	RINDGE	6.0	P	2600	8950
NEW POND	CANTERBURY	20.0	P	2200	7300
NORTHWOOD LAKE, STN 1	NORTHWOOD	50.0	P	2600	8950
NUTT POND	MANCHESTER	16.1	T	0	0
OPECHEE BAY	LACONIA	4.0	P	2600	8950
OTTERNICK POND	HUDSON	0.0	P	2210	4300
PAUGUS BAY, STN 1	LACONIA	10.0	P	2600	8950
PAWTUCKAWAY LAKE	NOTTINGHAM	0.2	P	1700	8700
PEARLY LAKE	RINDGE	142.2	P	2210	230
PHILLIPS POND	SANDOWN	25.0	P	2600	8950
PILLSBURY LAKE	WEBSTER	35.0	P	2200	7300
PINE ISLAND POND	MANCHESTER	42.4	T	0	0
POWDER MILL POND	HANCOCK	0.2	P	2600	8950
RUST POND	WOLFEBORO	210.0	T	0	0
SEBBINS POND	BEDFORD	19.8	P	2210	9000
SILVER LAKE	HOLLIS	33.7	T	0	0
SILVER LAKE	TILTON	2.0	P	2600	8950
SPOFFORD LAKE	CHESTERFIELD	706.8	T	0	0
ST. PAUL'S SCHOOL POND	CONCORD	2.0	P	2600	8950
STEVENS POND	MANCHESTER	15.5	T	0	0
SUNCOOK POND, LOWER	BARNSTEAD	6.0	P	2600	8950
SUNRISE LAKE	MIDDLETON	0.2	P	2600	8950
TURKEY POND, BIG	CONCORD	25.0	P	2600	8950
TURKEY POND, LITTLE	CONCORD	20.0	P	2600	8950
WENTWORTH, LAKE	WOLFEBORO	1.5	P	2600	8950
WINNIPESAUKEE, BROADS	GILFORD	350.0	P	2600	8950

<u>Lake</u>	<u>Town</u>	<u>Impaired Area (ac)</u>	<u>Use</u>	<u>Cause</u>	<u>Source</u>
WINNISQUAM, POT ISL.	LACONIA	15.0	P	2600	8950
YORK POND	BERLIN	21.0	P	2210	120

Use: N = not support; P = partially support; T = threatened

Cause: 1700 = pathogens; 2200 = noxious aquatic plants (native);
2210 = excessive algal growth/chlorophyll; 2600 = exotic plants

Source: 120 = minor industrial point source; 230 = package plant;
4300 = urban runoff; 7300 = dam construction; 8950 = other (exotic introduction);
8700 = recreation (heavy swim load); 9000 = unknown source

Add the following acres of partial support for swim use to the above table:

1. 0.2 acres of pathogen cause (1700) and heavy swim load source (8700) for Winnepesaukee (Weirs Beach).
2. 20 acres of exotic cause (2600) and other source (8950) for Pearly Lake.
3. 10 acres of exotic cause (2600) and other source (8950) for Mine Falls Pond

Note: causes and sources are not listed for threatened lakes
(all are because of increasing or anticipated increasing algal or macrophyte growth)

NHDES 2000 305(b) Report
Aquatic Life Use Support
NH Lakes that do not fully support the Aquatic Life Use

<u>Lake</u>	<u>Town</u>	<u>Impaired Area (ac)</u>	<u>Use</u>	<u>Cause</u>	<u>Source</u>
ASHUELOT POND	WASHINGTON	299.5	N	1000	8100
BAKER POND	CHESTERFIELD	14.2	N	1000	8100
BEAR BROOK POND, LITTLE	WENTWORTHS LOCATION	4.0	P	1000	8100
BEAR HILL POND	ALLENSTOWN	32.7	N	1000	8100
BLACK MOUNTAIN POND	SANDWICH	6.0	N	1000	8100
BOG POND, LITTLE	ODELL	37.0	P	1000	8100
BRYANT POND	DORCHESTER	16.5	P	1000	8100
BUTTERFIELD POND	WILMOT	11.9	N	1000	8100
CALDWELL POND	ALSTEAD	28.4	N	1000	8100
CARTER POND, UPPER	BEANS PURCHASE	1.1	P	1000	8100
CASS POND	RICHMOND	48.4	N	1000	8100
CENTER POND	NELSON	36.0	P	1000	8100
CLAPP POND	MARLBOROUGH	15.5	P	1000	8100
CONE POND	THORNTON	11.0	N	1000	8100
CONSTANCE LAKE	PIERMONT	9.0	N	1000	8100
CORSER POND	ERROL	5.0	P	1000	8100
CROOKED POND	LOUDON	29.1	P	1000	8100
DARRAH POND	LITCHFIELD	17.3	N	1000	8100
DERBY POND	CANAAN	10.0	P	1000	8100
EAST POND	LIVERMORE	6.7	P	1000	8100
ECHO LAKE	CONWAY	14.0	P	1000	8100
ELBOW POND	WOODSTOCK	55.6	P	1000	8100
EMERSON POND	RINDGE	113.2	P	1000	8100
FLAT MOUNTAIN POND (1&2)	WATERVILLE	38.7	N	1000	8100
FLETCHER POND	WASHINGTON	13.6	P	1000	8100
FORT EDDY POND	CONCORD	20.0	T	0	0
FROG POND	WASHINGTON	23.5	N	1000	8100
GRANITE LAKE	STODDARD	227.8	P	1000	8100
GREELEY POND (UPPER)	LIVERMORE	2.0	P	1000	8100
GUINEA POND	SANDWICH	10.0	P	1000	8100
HALFMILE POND	ENFIELD	6.8	N	1000	8100
HALL POND, LOWER	SANDWICH	12.4	P	1000	8100
HALL POND, MIDDLE	SANDWICH	8.0	P	1000	8100
HALL POND, UPPER	SANDWICH	22.7	P	1000	8100
HUNTS POND	HANCOCK	46.0	P	1000	8100
ISLAND POND	WASHINGTON	202.2	P	1000	8100
KILBURN POND	WINCHESTER	37.0	N	1000	8100
LEDGE POND	SUNAPEE	110.1	P	1000	8100
LILY POND	ALSTEAD	3.0	N	1000	8100
LONESOME LAKE	LINCOLN	27.2	N	1000	8100
LONG POND	LEMPSTER	120.0	N	1000	8100
LONG POND	MILLSFIELD	25.5	P	1000	8100
LOON POND	LINCOLN	18.5	N	1000	8100
MAY POND	WASHINGTON	149.0	N	1000	8100
MCCUTCHEON POND	DORCHESTER	8.7	N	1000	8100
MILL POND	ALTON	15.0	N	1000	9000

<u>Lake</u>	<u>Town</u>	<u>Impaired Area (ac)</u>	<u>Use</u>	<u>Cause</u>	<u>Source</u>
MILLEN POND	WASHINGTON	156.0	N	1000	8100
MINE FALLS POND	NASHUA	18.7	T	0	0
MUD POND	CANAAN	2.0	P	1000	8100
NIPPO POND	BARRINGTON	85.3	N	1000	8100
NUBANUSIT LAKE	NELSON	715.0	P	1000	8100
NUTT POND	MANCHESTER	16.1	P	1000	4300
PEAKED HILL POND	THORNTON	11.0	P	1000	8100
PERCH POND, LITTLE	CAMPTON	19.2	P	1000	8100
PISGAH RESERVOIR	WINCHESTER	110.0	N	1000	8100
POUT POND	BELMONT	14.2	P	1000	8100
POUT POND	DORCHESTER	8.7	P	1000	8100
POVERTY POND	HILL	11.1	P	1000	8100
ROCKWOOD POND	FITZWILLIAM	76.0	P	1000	8100
ROCKY POND	WENTWORTH	27.8	N	1000	8100
RUSSELL POND	WOODSTOCK	39.0	P	1000	8100
RYE POND	NELSON	13.0	P	1000	8100
SACO LAKE	CARROLL	9.0	N	1000	8100
SAND POND	MARLOW	159.1	P	1000	8100
SAWYER POND, LITTLE	LIVERMORE	11.0	P	1000	8100
SHEEHAN FLOWAGE	CLARKSVILLE	50.0	P	1000	8100
SIGNAL POND	ERROL	6.0	N	1000	8100
SILVER LAKE	HARRISVILLE	332.7	P	1000	8100
SIP POND	FITZWILLIAM	117.8	P	1000	8100
SOLITUDE, LAKE	NEWBURY	5.0	N	1000	8100
SPECTACLE POND	GROTON	45.8	P	1000	8100
SPOONWOOD LAKE	NELSON	144.7	P	1000	8100
STEVENS POND	MANCHESTER	15.5	T	0	0
SWEAT POND	ERROL	6.0	P	1000	8100
THREE PONDS, MIDDLE	WARREN	18.6	N	1000	8100
THREE PONDS, UPPER	WARREN	11.5	N	1000	8100
TOWER HILL POND	CANDIA	157.0	N	1000	8100
TRIO POND, THREE	ODELL	17.9	P	1000	8100
TRIO PONDS, ONE AND TWO	ODELL	67.8	P	1000	8100
TROUT POND	STODDARD	12.1	N	1000	8100
UNCANOONUC LAKE	GOFFSTOWN	24.0	P	1000	8100
WAKONDAH POND	MOULTONBORO	92.0	P	1000	8100
WAUKEENA LAKE	DANBURY	52.6	P	1000	8100
WHITCOMB POND	ODELL	18.5	P	1000	8100
WHITE LAKE	TAMWORTH	123.0	P	1000	8100
WHITTON POND	ALBANY	142.6	N	1000	8100
WIGHT POND	DUBLIN	13.0	P	1000	8100
WILLEY POND, BIG	STRAFFORD	47.5	N	1000	8100
WILLEY POND, LITTLE	STRAFFORD	32.5	N	1000	8100
WINKLEY POND	BARRINGTON	11.4	N	1000	8100
WRIGHT POND	PITTSBURG	6.0	P	1000	8100
YORK POND	BERLIN	21.0	N	1000	120

Use: N = not support; P = partially support; T = threatened

Cause: 1000 = pH

Source: 8100 = atmospheric deposition; 120 = minor industrial point source
4300 = urban runoff; 9000 = unknown source

Note: causes and sources are not listed for threatened lakes
(all are because of elevated chloride levels)

***305(b) LIST
FOR
COASTAL ESTUARIES***

1998 305(b) List for NH Estuaries				COASTAL ESTUARIES				1 8/24/00	
Water Body Name Identification No. & Location	Use Class	Overall Use Support & Square Miles Affected	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Square Miles Affected	Required Action &	Data Source	
BELLAMY RIVER (TIDAL PORTION; TOTAL AREA = 0.68 SQ. MILES) NHE60003120-02.0103 DOVER	B	NS 0.68 <div>Overlapping files: 314</div>	95-GB2-9-1 95-GB8-7-4 EVALUATED (PCBs)	BACTERIA (FECAL)	UNKNOWN	NS 0.68	INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. CONTINUE MONITORING.	File #: 10 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM	
BELLAMY RIVER (TIDAL PORTION; TOTAL AREA = 0.68 SQ. MILES) NHE60003120-02.0103 DOVER	B	<div>Overlapping files: 10</div>	EVALUATED (PCBs)	PCBs IN LOBSTER TOMALLEY AND BLUEFISH	UNKNOWN	PS 0.68	INVESTIGATE SOURCES. CONTINUE MONITORING.	File #: 314 1991 DPHS HEALTH RISK ASSESSMENT OF PESTICIDES & PCBs IN LOBSTERS FROM GREAT BAY, DPHS #91-007; 1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH	
BLACKWATER RIVER (TIDAL PORTION; TOTAL AREA = 0.22 SQ. MILES) NHE60003150-00.0103 SEABROOK	B	NS 0.22 <div>Overlapping files: 321</div>	95-HH2B-11-1	BACTERIA (FECAL)	UNKNOWN	NS 0.22	INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. CONTINUE MONITORING.	File #: 11 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM	
BLACKWATER RIVER (TIDAL PORTION; TOTAL AREA = 0.22 SQ. MILES) NHE60003150-00.0103 SEABROOK	B	<div>Overlapping files: 11</div>	EVALUATED (PCBs)	PCBs IN BLUEFISH	UNKNOWN	PS 0.22	INVESTIGATE SOURCES. CONTINUE MONITORING.	File #: 321 1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH	

1998 305(b) List for NH Estuaries								
COASTAL ESTUARIES								
Water Body Name Identification No. & Location	Use Class	Overall Use Support & Square Miles Affected	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Square Miles Affected	Required Action &	2 8/24/00 Data Source
COCHECO RIVER(TIDAL PORTION; TOTAL AREA = 0.25 SQ. MILES) NHE60003090-00.0103 DOVER	B	NS 0.25 <div>Overlapping files: 315</div>	95-GB21-4-2-1 95-GB21-4-2-1	BACTERIA (FECAL)	UNKNOWN	NS 0.25	INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. CONTINUE MONITORING.	File #: 17 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM
COCHECO RIVER(TIDAL PORTION; TOTAL AREA = 0.25 SQ. MILES) NHE60003090-00.0103 DOVER	B	<div>Overlapping files: 17</div>	EVALUATED (PCBs)	PCBs IN LOBSTER TOMALLEY AND BLUEFISH	UNKNOWN	PS 0.25	INVESTIGATE SOURCES. CONTINUE MONITORING.	File #: 315 1991 DPHS HEALTH RISK ASSESSMENT OF PESTICIDES & PCBs IN LOBSTERS FROM GREAT BAY, DPHS #91-007; 1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH
GREAT BAY & LITTLE BAY (TIDAL PORTION; TOTAL AREA = 9.65 SQ. MILES) NHE60003120-00.0103 DOVER DURHAM GREENLAND NEWINGTON NEWMARKET	B	NS 2.47 <div>Overlapping files: 316</div>	95-GB2-9-1 95-GB4B-8-1 95-GB15-6-4 95-GB4A-8-1 95-GB7B-14-1 95-GB19-14-1 95-GB23-13-1 95-GB50-10-1 95-GB80-6-2	BACTERIA (FECAL)	UNKNOWN	NS 2.47	INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. CONTINUE MONITORING.	File #: 38 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM
GREAT BAY & LITTLE BAY (TIDAL PORTION; TOTAL AREA = 9.65 SQ. MILES) NHE60003120-00.0103 DOVER DURHAM GREENLAND NEWINGTON NEWMARKET	B	PS 7.18 <div>Overlapping files: 38</div>	EVALUATED (PCBs)	PCBs IN LOBSTER TOMALLEY AND BLUEFISH	UNKNOWN	PS 9.65	INVESTIGATE SOURCES. CONTINUE MONITORING.	File #: 316 1991 DPHS HEALTH RISK ASSESSMENT OF PESTICIDES & PCBs IN LOBSTERS FROM GREAT BAY, DPHS #91-007; 1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH

1998 305(b) List for NH Estuaries								
COASTAL ESTUARIES								
Water Body Name Identification No. & Location	Use Class	Overall Use Support & Square Miles Affected	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Square Miles Affected	Required Action &	3 8/24/00 Data Source
HAMPTON HARBOR (TIDAL AREA; TOTAL AREA = 1.41 SQ. MILES) NHE60003142-01.0103 HAMPTON/HAMPTON FALLS/SEABROOK (INCLUDING TIDAL TRIBUTARIES EXCEPT THE BLACKWATER RIVER)	B	NS 0.80 <div>Overlapping files: 322,328</div>	95-HH1A-9-1 95-HH5B-25-2 95-HH5C-24-1 95-HH11-17-2 95-HH18-25-1 95-HH19-16-3 95-HH17-17-2	BACTERIA (FECAL)	UNKNOWN	NS 0.80	INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. CONTINUE MONITORING.	File #: 42 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM
HAMPTON HARBOR (TIDAL AREA; TOTAL AREA = 1.41 SQ. MILES) NHE60003142-01.0103 HAMPTON/HAMPTON FALLS/SEABROOK (INCLUDING TIDAL TRIBUTARIES EXCEPT THE BLACKWATER RIVER)	B	<div>Overlapping files: 42,328</div>	EVALUATED (PCBs)	PCBs IN BLUEFISH	UNKNOWN	PS 1.41	INVESTIGATE SOURCES. CONTINUE MONITORING.	File #: 322 1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH
HAMPTON HARBOR (TIDAL AREA; TOTAL AREA = 1.41 SQ. MILES) NHE60003142-01.0103 HAMPTON/HAMPTON FALLS/SEABROOK (INCLUDING TIDAL TRIBUTARIES EXCEPT THE BLACKWATER RIVER)	B	PS 0.61 <div>Overlapping files: 42,322</div>	95-HH1A-9-1 95-HH5B-25-2 95-HH5C-24-1 95-HH11-17-2 95-HH18-25-1 95-HH19-16-3 95-HH17-17-2	BACTERIA (FECAL)	UNKNOWN	PS 0.61	SHELLFISH AREA IS OPEN DURING DRY WEATHER BUT CLOSED DURING WET WEATHER. INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. CONTINUE MONITORING.	File #: 328 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM
LAMPREY RIVER (TIDAL PORTION; TOTAL AREA = 0.16 SQ. MILES) NHE60003100-00.0103 NEWMARKET	B	NS 0.16 <div>Overlapping files: 317,327,329,330</div>	95-GB15-6-4	BACTERIA (FECAL)	UNKNOWN	NS 0.16	INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. CONTINUE MONITORING.	File #: 49 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM

1998 305(b) List for NH Estuaries								4 8/24/00
COASTAL ESTUARIES								
Water Body Name Identification No. & Location	Use Class	Overall Use Support & Square Miles Affected	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Square Miles Affected	Required Action &	Data Source
LAMPREY RIVER (TIDAL PORTION; TOTAL AREA = 0.16 SQ. MILES) NHE60003100-00.0103 NEWMARKET	B		EVALUATED (PCBs)	PCBs IN LOBSTER TOMALLEY AND BLUEFISH	UNKNOWN	PS 0.16	INVESTIGATE SOURCES. CONTINUE MONITORING.	File #: 317 1991 DPHS HEALTH RISK ASSESSMENT OF PESTICIDES & PCBs IN LOBSTERS FROM GREAT BAY, DPHS #91-007; 1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH
		Overlapping files: 49,327,329,330						
LAMPREY RIVER (TIDAL PORTION; TOTAL AREA = 0.16 SQ. MILES) NHE60003100-00.0103 NEWMARKET (AROUND NEW RD BELOW TIDAL DAM AND NEWMARKET WWTF)	B		93-4LMP-6-2	COPPER (WET WEATHER) ZINC)	UNKNOWN	PS 0.16	RESAMPLE	File #: 327 FY92 104(B)(3) PROJECT, LAMPREY RIVER WATERSHED
		Overlapping files: 49,317,329,330						
LAMPREY RIVER (TIDAL PORTION; TOTAL AREA = 0.16 SQ. MILES) NHE60003100-00.0103 NEWMARKET (AROUND NEW RD BELOW TIDAL DAM AND NEWMARKET WWTF)	B		93-4LMP-6-3	LEAD (WET WEATHER)	UNKNOWN	PS 0.16	RESAMPLE	File #: 329 FY92 104(B)(3) PROJECT, LAMPREY RIVER WATERSHED
		Overlapping files: 49,317,327,330						
LAMPREY RIVER (TIDAL PORTION; TOTAL AREA = 0.16 SQ. MILES) NHE60003100-00.0103 NEWMARKET (AROUND NEW RD BELOW TIDAL DAM AND NEWMARKET WWTF)	B		93-4LMP-6-3	ZINC (WET WEATHER)	UNKNOWN	PS 0.16	RESAMPLE	File #: 330 FY92 104(B)(3) PROJECT, LAMPREY RIVER WATERSHED
		Overlapping files: 49,317,327,329						

1998 305(b) List for NH Estuaries								
COASTAL ESTUARIES								
Water Body Name Identification No. & Location	Use Class	Overall Use Support & Square Miles Affected	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Square Miles Affected	Required Action &	5 8/24/00 Data Source
OYSTER RIVER(TIDAL PORTION; TOTAL AREA = 0.48 SQ. MILES) NHE60003120-03.0103 DURHAM	B	NS 0.48 <div>Overlapping files: 319</div>	95-GB3-6-1 95-GB50-10-11	BACTERIA (FECAL)	UNKNOWN	NS 0.48	INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. CONTINUE MONITORING.	File #: 71 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM
OYSTER RIVER(TIDAL PORTION; TOTAL AREA = 0.48 SQ. MILES) NHE60003120-03.0103 DURHAM	B	<div>Overlapping files: 79</div>	EVALUATED (PCBs)	PCBs IN LOBSTER TOMALLEY AND BLUEFISH	UNKNOWN	PS 0.48	INVESTIGATE SOURCES. CONTINUE MONITORING.	File #: 319 1991 DPHS HEALTH RISK ASSESSMENT OF PESTICIDES & PCBs IN LOBSTERS FROM GREAT BAY, DPHS #91-007; 1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH
PISCATAQUA RIVER (TOTAL AREA = 7.27.5 SQ. MILES) NHE60003146-00.0103 DOVER, NEWCASTLE, NEWINGTON, PORSTMOUTH, ROLLINSFORD	B	NS 7.27 <div>Overlapping files: 325, 482, 484</div>	95-GB13-6-1 95-GB20-20-5	BACTERIA (FECAL)	UNKNOWN	NS 7.27	INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. TWO CSOs IN PORTSMOUTH (SOUTH MILL POND) CONTRIBUTE SOME BACTERIA. FACILITY PLAN TO ABATE CSOs HAS BEEN SUBMITTED TO EPA AND DES FOR REVIEW. CONTINUE MONITORING.	File #: 104 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM
PISCATAQUA RIVER (TOTAL AREA = 7.27.5 SQ. MILES) NHE60003146-00.0103 DOVER, NEWCASTLE, NEWINGTON, PORSTMOUTH, ROLLINSFORD	B	<div>Overlapping files: 104, 482, 484</div>	EVALUATED (PCBs)	PCBs IN LOBSTER TOMALLEY AND BLUEFISH	UNKNOWN	PS 7.27	INVESTIGATE SOURCES. CONTINUE MONITORING.	File #: 325 1991 DPHS HEALTH RISK ASSESSMENT OF PESTICIDES & PCBs IN LOBSTERS FROM GREAT BAY, DPHS #91-007; 1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH

1998 305(b) List for NH Estuaries

COASTAL ESTUARIES

6
8/24/00

Water Body Name Identification No. & Location	Use Class	Overall Use Support & Square Miles Affected	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Square Miles Affected	Required Action &	Data Source
PISCATAQUA RIVER (TOTAL AREA = 7.27.5 SQ. MILES) NHE60003146-00.0103 PORTSMOUTH (NORTH MILL POND)	B	Overlapping files: 104, 325, 484	98-PM8020-2-2 98-PM8050-3-3 98-PM8070-1-1 98-PM8500-2-2 98-PM8502-1-1 98-PM8505-2-2 98-PM8700-2-2	PATHOGENS (E.COLI)	ILLICIT CONNECTIONS (UNTREATED SEWAGE)	NS 0.03	UNTREATED SEWAGE TO NORTH MILL POND (0.03 SM) . NS FOR SWIMMING. WORK WITH CITY TO ELIMINATE DISCHARGES.	File #: 482 1998 & 1999 NPS PROGRAM
PISCATAQUA RIVER (TOTAL AREA = 7.27.5 SQ. MILES) NHE60003146-00.0103 PORTSMOUTH (SOUTH MILL POND)	B	Overlapping files: 104, 325, 482	MONITORED	PATHOGENS (E.COLI)	CSOS	NS 0.01	UNTREATED SEWAGE TO SOUTH MILL POND (0.01 SM) FROM CSOS. NS FOR SWIMMING. EPA/NHDES ARE WORKING WITH THE CITY TO ABATE POLLUTION FROM CSOS. CITY IS DOING SOME SEPARATION WORK AND MUST SUBMIT AN UPDATED CSO FACILITY PLAN BY JANUARY 2002.	File #: 484 1991 CSO FACILITY PLAN BY WHITMAN AND HOWARD
RYE HARBOR (TIDAL PORTION; TOTAL AREA = 0.07 SQ. MILES) NHE60003142-05.0103 RYE	B	NS 0.07 Overlapping files: 323	95-RH1-4-1	BACTERIA (FECAL)	UNKNOWN	NS 0.07	INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. CONTINUE MONITORING.	File #: 84 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM
RYE HARBOR (TIDAL PORTION; TOTAL AREA = 0.07 SQ. MILES) NHE60003142-05.0103 RYE	B	Overlapping files: 84	EVALUATED (PCBs)	PCBs IN LOBSTER TOMALLEY AND BLUEFISH	UNKNOWN	PS 0.07	INVESTIGATE SOURCES. CONTINUE MONITORING.	File #: 323 1991 DPHS HEALTH RISK ASSESSMENT OF PESTICIDES & PCBs IN LOBSTERS FROM GREAT BAY, DPHS #91-007; 1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH

1998 305(b) List for NH Estuaries								
COASTAL ESTUARIES								
Water Body Name Identification No. & Location	Use Class	Overall Use Support & Square Miles Affected	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Square Miles Affected	Required Action &	7 8/24/00 Data Source
SALMON FALLS RIVER(TIDAL PORTION; TOTAL AREA = 0.57 SQ. MILES) NHE60003050-00.0103 DOVER	B	NS 0.57 <div>Overlapping files: 324</div>	95-GB22-4-0	BACTERIA (FECAL)	UNKNOWN	NS 0.57	INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. CONTINUE MONITORING.	File #: 86 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM
SALMON FALLS RIVER(TIDAL PORTION; TOTAL AREA = 0.57 SQ. MILES) NHE60003050-00.0103 DOVER	B	<div>Overlapping files: 86</div>	EVALUATED (PCBs)	PCBs IN LOBSTER TOMALLEY AND BLUEFISH	UNKNOWN	PS 0.57	INVESTIGATE SOURCES. CONTINUE MONITORING.	File #: 324 1991 DPHS HEALTH RISK ASSESSMENT OF PESTICIDES & PCBs IN LOBSTERS FROM GREAT BAY, DPHS #91-007; 1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH
SQUAMSCOTT RIVER(TIDAL PORTION; TOTAL AREA = 0.48 SQ. MILES) NHE60003110-00.0103 EXETER/NEWFIELDS/ STRATHAM	B	NS 0.48 <div>Overlapping files: 320</div>	95-GB80-6-2	BACTERIA (FECAL)	UNKNOWN	NS 0.48	INVESTIGATE SOURCES. IMPLEMENT THE RECOMMENDATIONS IN THE DES COASTAL WATERSHED STATUS REPORT, 12/95. CONTINUE MONITORING.	File #: 90 1995 DPHS/F&G SHELLFISH SAMPLING PROGRAM
SQUAMSCOTT RIVER(TIDAL PORTION; TOTAL AREA = 0.48 SQ. MILES) NHE60003110-00.0103 EXETER/NEWFIELDS/ STRATHAM	B	<div>Overlapping files: 90</div>	EVALUATED (PCBs)	PCBs IN LOBSTER TOMALLEY AND BLUEFISH	UNKNOWN	PS 0.48	INVESTIGATE SOURCES. CONTINUE MONITORING.	File #: 320 1991 DPHS HEALTH RISK ASSESSMENT OF PESTICIDES & PCBs IN LOBSTERS FROM GREAT BAY, DPHS #91-007; 1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH

***305(b) LIST
FOR
OPEN OCEAN WATERS***

1998 305(b) List for NH Estuaries

OPEN OCEAN WATERS

1
8/24/00

Water Body Name Identification no.	Use Class	Overall Use Support & Square Miles Affected	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Square Miles Affected	Required Action &	Data Source
OPEN OCEAN WITHIN NH JURISDICTION	B	PS 54.00	EVALUATED	PCB IN BLUEFISH TISSUE	UNKNOWN	PS 54.00	RESAMPLE FISH TISSUE.	File #: 256
NHO		Overlapping file: 364						1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH
NH COAST								
OPEN OCEAN WITHIN NH JURISDICTION	B		EVALUATED	OTHER (ADMINISTRATIVE)	OTHER	PS 54.00	NSSP REGULATIONS REQUIRE A SANITARY SURVEY BEFORE SHELLFISH BEDS CAN BE OPENED. SINCE A SANITARY SURVEY HAS NOT BEEN CONDUCTED, THIS AREA HAS BEEN CLASSIFIED AS UNCLASSIFIED (CLOSED). THIS CLOSURE IS NOT BASED ON ANY KNOWN BACTERIA EXCEEDANCES, RATHER IT IS MORE OF AN ADMINISTRATIVE CLOSURE. TO OPEN THIS AREA, A SANITARY SURVEY WILL NEED TO BE CONDUCTED.	File #: 364
NHO		Overlapping file: 256						1998 LETTER FROM NHF&G TO DHHS.
NH COAST								

***305(b) LIST
FOR
COASTAL (SHORELINE) OCEAN WATERS***

1998 305(b) List for NH - Coastal (Shoreline)			COASTAL (SHORELINE) OCEAN WATERS						1 8/24/00
Water Body Name Identification no.	Use Class	Overall Use Support & Miles	Assessment Basis	Water Quality Standard Exceeded	Probable Source	Individual Use Support & Miles Affected	Required Action &	Data Source	
COASTAL (SHORELINE) OCEAN WATERS	B	PS 18.00	EVALUATED	PCB IN BLUEFISH TISSUE	UNKNOWN	PS 18.00	RESAMPLE FISH TISSUE.	File #: 365	
NHC		Overlapping Files: 366						1987 NOAA REPORT OF 1984-86 FEDERAL SURVEY OF PCB IN ATLANTIC COAST BLUEFISH	
NH COAST									
COASTAL (SHORELINE) OCEAN WATERS	B		EVALUATED	OTHER (ADMINISTRATIVE)	OTHER (ADMINISTRATIVE)	PS 18.00	NSSP REGULATIONS REQUIRE A SANITARY SURVEY BEFORE SHELLFISH BEDS CAN BE OPENED. SINCE A SANITARY SURVEY HAS NOT BEEN CONDUCTED, THIS AREA HAS BEEN CLASSIFIED AS UNCLASSIFIED (CLOSED). THIS CLOSURE IS NOT BASED ON ANY KNOWN BACTERIA EXCEEDANCES, RATHER IT IS MORE OF AN ADMINISTRATIVE CLOSURE. TO OPEN THIS AREA, A SANITARY SURVEY WILL NEED TO BE CONDUCTED.	File #: 366	
NHC		Overlapping Files: 365						1998 LETTER FROM NHF&G TO DHHS.	
NH COAST									

Note: This table does not account for the fish consumption advisory due to mercury for all inland fresh waterbodies.

APPENDIX D

***Waterbodies Currently Used as
Public Water Supplies***

Table D-1
Miles of Rivers and Streams Currently Used as Public Water Supplies
Which Fully Support the Drinking Water Use

Name	Town	Miles
Albany Brook	Bartlett	2.5
Ammonoosuc River	Berlin	19.0
Androscoggin River	Berlin	25.0
Zealand River	Bethlehem	3.3
Sugar River	Claremont	25.0
Contoocook River	Concord	25.0
Oyster River	Durham	28.5
Exeter River	Exeter	25.0
Dearborn Brook	Exeter	1.9
Whittle Brook	Goffstown	0.4
Ice Gulch	Gorham	1.5
Perkins Brook	Gorham	1.8
Ammonoosuc River	Woodsville / Haverhill	22.0
Garland Brook	Lancaster	6.2
Mascoma River	Lebanon	19.3
E. Branch of Pemigewasset River	Lincoln	25.0
Gale River (North Branch)	Littleton	3.9
Gale River (South Branch)	Bethlehem / Littleton	2.2
Merrimack River	Nashua	25.0
Follets Brook	Newmarket	2.0
Piscassic River	Newmarket	23.9
Lamprey River	Durham / Newmarket	25.0
Berry River	Rochester	8.3
Salmon Falls River	Somersworth	25.0
Fassett Brook	Troy	1.7
Connecticut River	Westmoreland	25.0
Total =		245.0

Notes: Only surface waters used as public drinking water supplies were included in the assesement for drinking water. All such surface waters fully support tthe drinking water use.

River miles were based on the total miles of rivers and streams upstream of the public water supply intake up to a maximum of approximately 25 miles.

As discussed in Part III, Chapter 3, drinking water assessments are based on sampling of finished (treated) water and restrictions on drinking water supplies.

Table D-2
Acres of Lakes and Ponds Currently Used as Public Water Supplies
Which Fully Support the Drinking Water Use

Name	Town	Acreage
Bradley Lake	Andover	169.4
Canaan Street Reservoir	Canaan	303.0
Dole Reservoir	Claremont	11.0
Rice Reservoir	Claremont	11.0
Whitewater Reservoir	Claremont	20.0
Penacook Lake	Concord	358.6
Tobey Reservoir	Greenville	108.0
Juggernaut Pond	Hancock	23.5
Fletcher Reservoir	Hanover	35.1
Parker Reservoir	Hanover	33.6
Hanover Reservoir	Hanover	33.0
Loon Pond	Hillboro	155.8
Bear Pond	Hopkinton	49.5
Babbidge Reservoir	Keene	31.0
Paugus Bay	Laconia	1205.8
Loon Pond	Lincoln	18.5
Lake Massabesic	Manchester	2512.4
Lake Waukegan	Meredith	912.5
Harris Pond /Pennichuck Brook	Nashua	83.0
Bowers Pond	Nashua	106.4
Mountain Pond	New Hampton	22.3
Gilman Pond	Newport	66.8
Berry Pond	Pittsfield	33.4
Bellamy Reservoir	Portsmouth	382.2
Rochester Reservoir & Round Pond	Rochester	99.0
Canobie Lake	Salem	373.4
Arlington Mills Reservoir	Salem	320.0
Lake Sunapee	Sunapee	4085.0
Upper Beach Pond	Wolfeboro	136.0
Total =		11699.2

Notes: Only surface waters used as public drinking water supplies were included in the assessment for drinking water. All such surface waters fully support the drinking water use.
As discussed in Part III, Chapter 3, drinking water assessments are based on sampling of finished (treated) water and restrictions on drinking water supplies.

APPENDIX E

Maps Showing Shellfish Bed Classifications

FIGURE E-1
SHELLFISH BED CLASSIFICATIONS

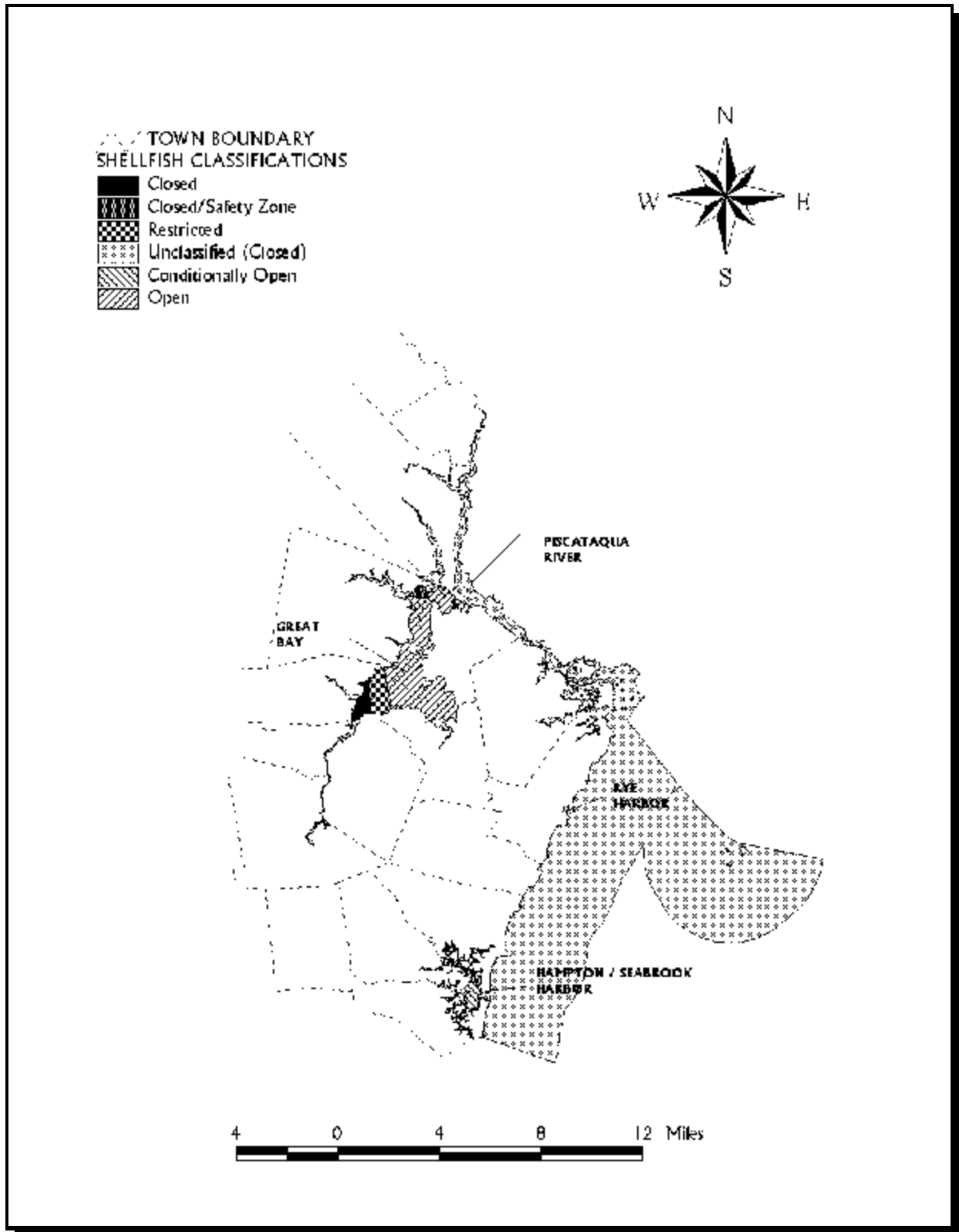


FIGURE E-2
GREAT BAY / LITTLE BAY
SHELLFISH BED CLASSIFICATION

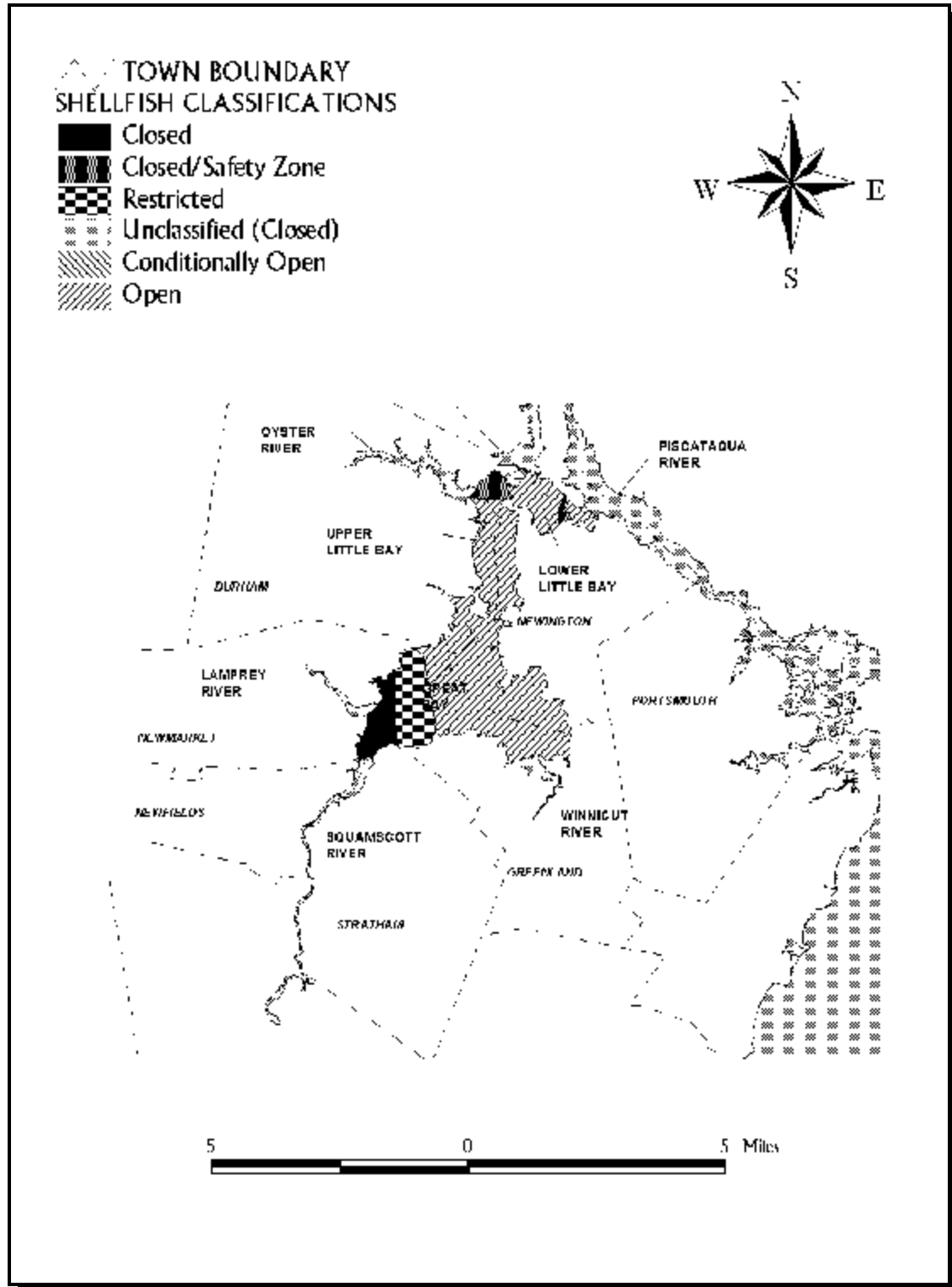


FIGURE E-3
UPPER PISCATAQUA RIVER

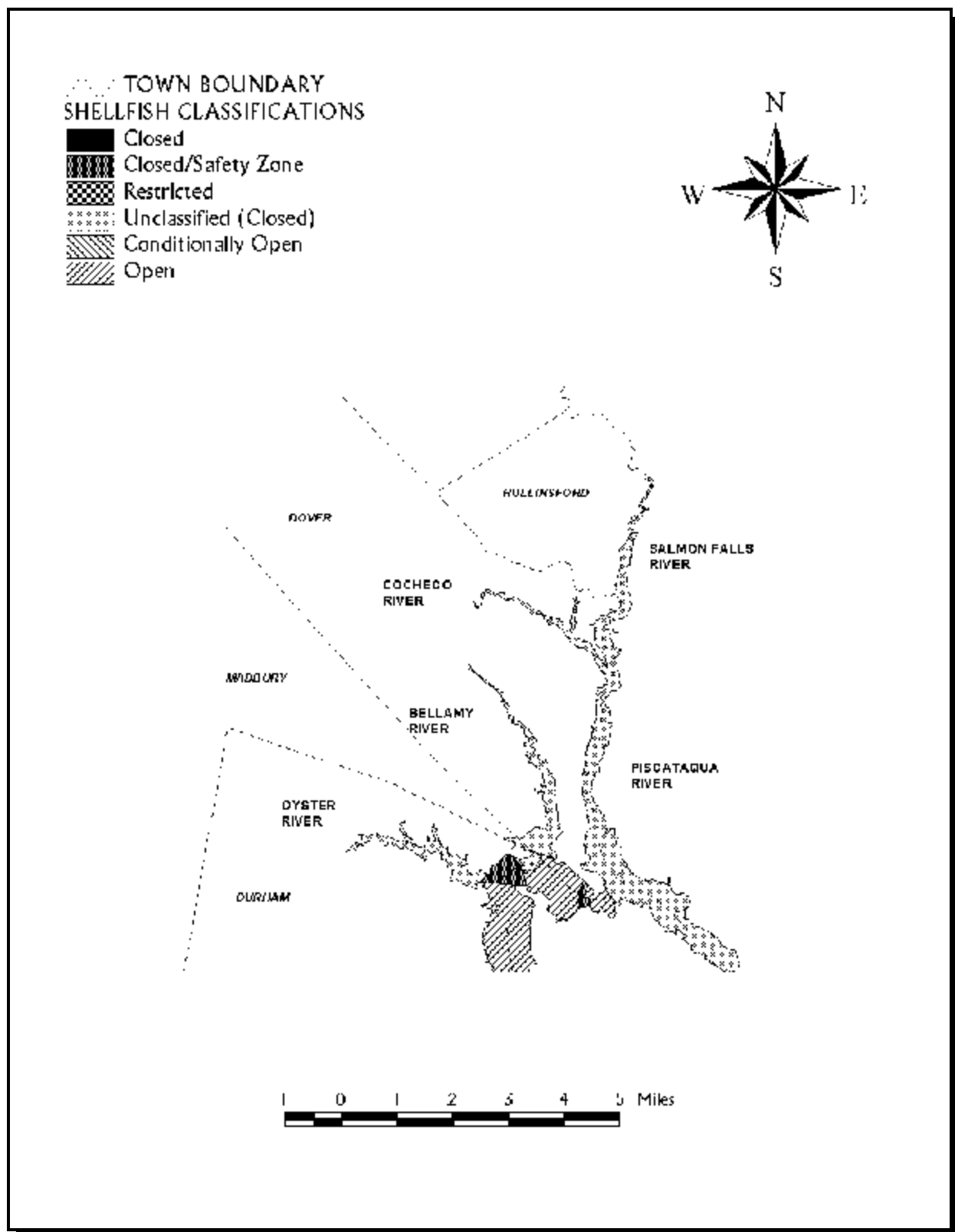


FIGURE E-4
LOWER PISCATAQUA RIVER

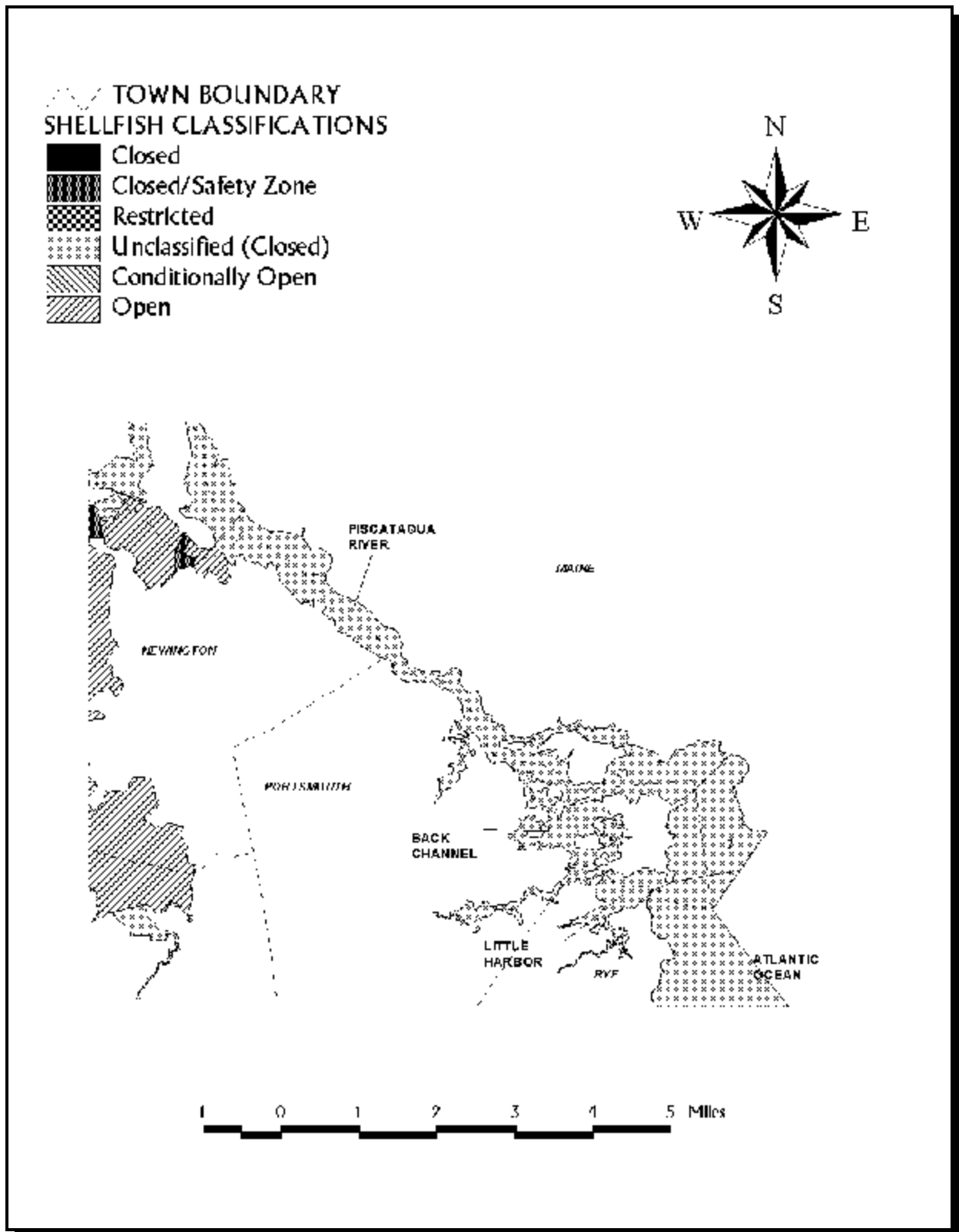


FIGURE E-5
 RYE HARBOR
 SHELLFISH BED CLASSIFICATIONS

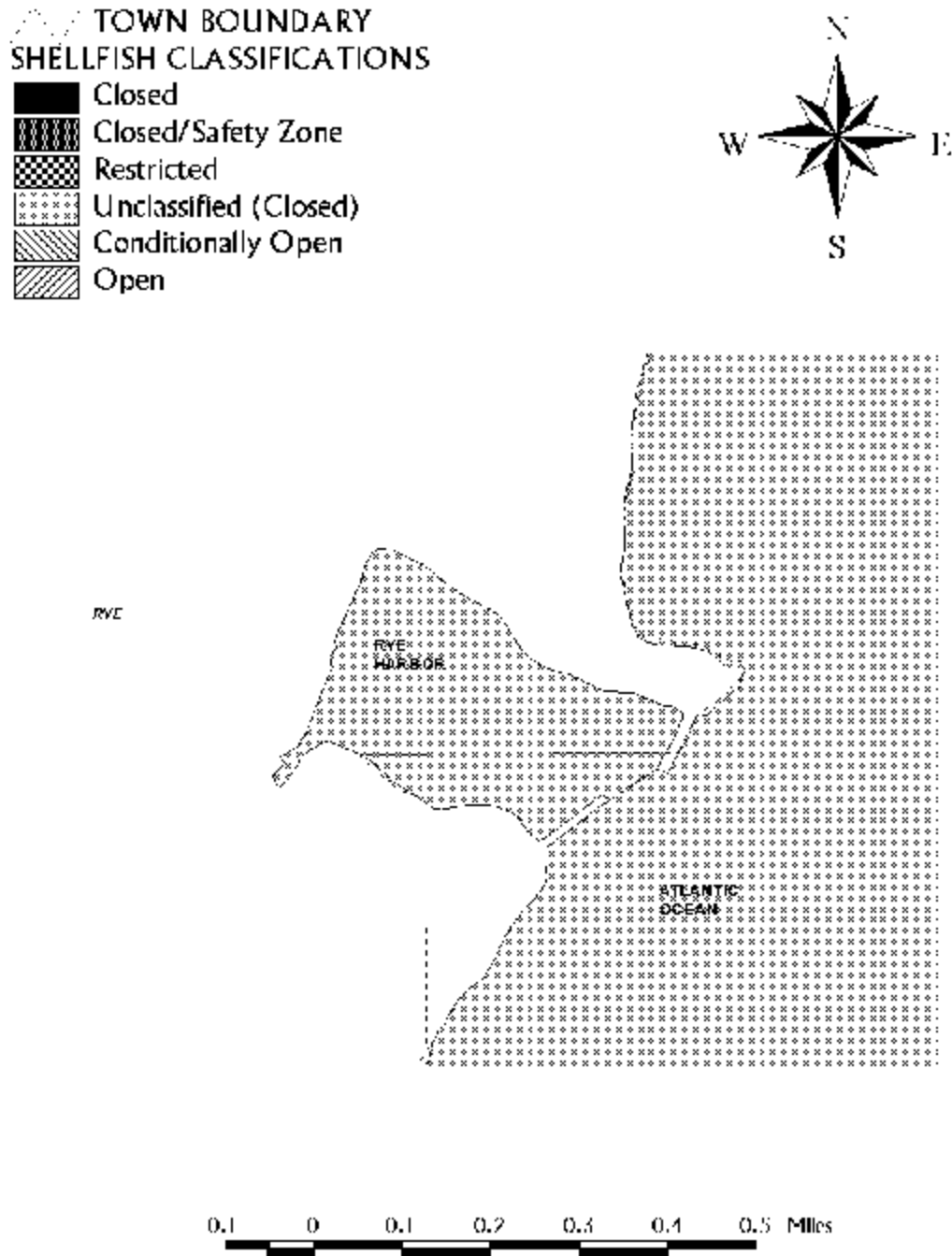
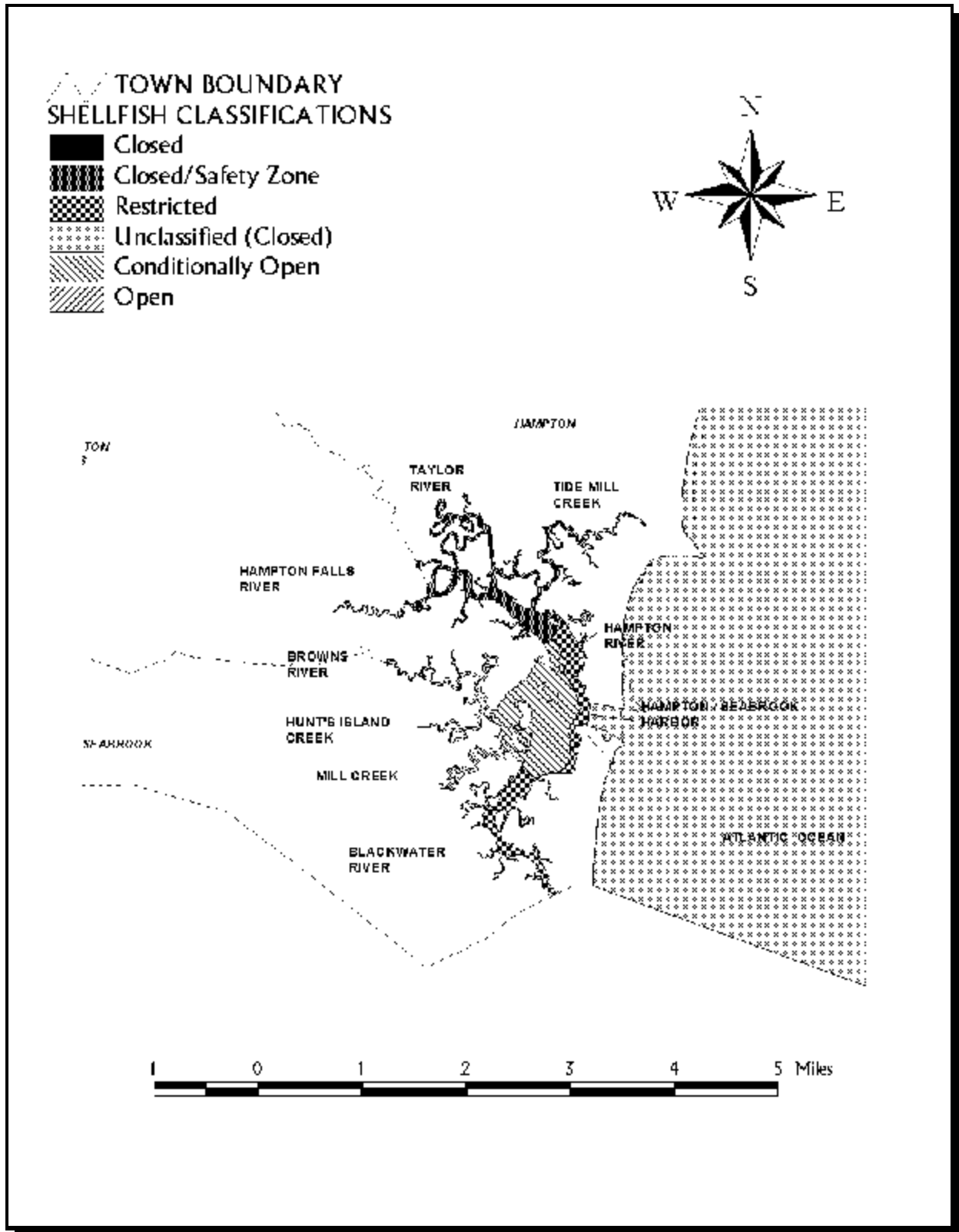


FIGURE E-6
HAMPTON / SEABROOK
SHELLFISH BED CLASSIFICATIONS



APPENDIX F

***NOAA
National Estuarine and
Coastal Discharge Inventory***

NATIONAL ESTUARINE INVENTORY - NATIONAL COASTAL POLLUTION DISCHARGE INVENTORY

NONPOINT SOURCES OF PHOSPHORUS BY ESTUARY - ANNUAL TOTALS

02/18/83

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REGION	NUMBER	NAME	Z EDA COVER	AGRIC. TOTP (1)	FOREST TOTP (2)	URBAN TOTP (3)	OTHER TOTP (4)	UPSTREAM TOTP (5)	TOTAL** PHOSPH.
NORTHEAST									
	1.01	PASSAMAQUODDY BAY	43	5 (15)	0 (0)	14 (43)	0 (0)	0 (0)	32
	1.02	ENGLISHMAN BAY	100	3 (13)	0 (0)	7 (30)	0 (0)	0 (0)	23
	1.03	NARRAGUSETT BAY	100	3 (25)	0 (0)	3 (25)	0 (0)	0 (0)	12
	1.04	BLUE HILL BAY	97	1 (2)	0 (0)	13 (35)	0 (0)	0 (0)	37
	1.05	PENOBSCOT BAY	35	4 (0)	1 (0)	23 (2)	0 (0)	686 (88)	775
	1.06	MUSCONGUS BAY	100	2 (13)	0 (0)	3 (20)	0 (0)	0 (0)	15
	1.07	SHEEPSHOTT BAY	16	14 (2)	0 (0)	32 (4)	0 (0)	543 (84)	641
	1.08	CASCO BAY	84	13 (2)	0 (0)	45 (9)	0 (0)	0 (0)	471
	1.09	SACO BAY	31	2 (1)	0 (0)	22 (11)	0 (0)	55 (28)	195
→	1.10	GREAT BAY	95	7 (3)	0 (0)	36 (17)	0 (0)	0 (0)	203
	1.11	MERRIMACK RIVER	30	4 (0)	0 (0)	86 (5)	0 (0)	722 (44)	1628
	1.12	BOSTON BAY	97	1 (0)	0 (0)	302 (6)	0 (0)	0 (0)	491
	1.13	CAPE COD BAY	100	0 (0)	0 (0)	17 (9)	0 (0)	0 (0)	185
	1.14	BUZZARDS BAY	100	3 (1)	0 (0)	20 (9)	0 (0)	0 (0)	216
	1.15	NARRAGANSETT BAY	100	17 (0)	0 (0)	217 (12)	0 (0)	0 (0)	1778
	1.16	GARDINERS BAY	100	4 (0)	0 (0)	29 (6)	0 (0)	0 (0)	440
	1.17	LONG ISLAND SOUND	49	38 (0)	1 (0)	589 (7)	0 (0)	1899 (25)	7527
	1.18	GREAT SOUTH BAY	100	6 (0)	0 (0)	277 (6)	0 (0)	0 (0)	4154
	1.19	HUDSON RIVER/RARITAN BAY	79	182 (0)	2 (0)	987 (4)	0 (0)	1270 (5)	23160
	1.20	BARNEGAT BAY	100	16 (3)	0 (0)	164 (33)	0 (0)	0 (0)	494
	1.21	DELAWARE BAY	79	177 (1)	0 (0)	425 (3)	0 (0)	1697 (13)	13115
	1.22	CHINCOTEAGUE BAY	100	22 (26)	0 (0)	1 (1)	0 (0)	0 (0)	83
	1.23	CHESAPEAKE BAY	80	493 (2)	1 (0)	947 (5)	0 (0)	4233 (25)	16838
	REGIONAL TOTALS			1017 (1)	5 (0)	4259 (5)	0 (0)	11105 (14)	76983
SOUTHEAST									
	2.01	ALBEMARLE SOUND	84	280 (17)	0 (0)	81 (5)	0 (0)	882 (55)	1588
	2.02	PAMLICO SOUND	67	176 (8)	0 (0)	21 (1)	0 (0)	1524 (76)	1987
	2.03	ROBUE SOUND	100	27 (49)	0 (0)	2 (3)	0 (0)	0 (0)	55
	2.04	NEW RIVER	100	21 (17)	0 (0)	40 (34)	0 (0)	0 (0)	117
	2.05	CAPE FEAR RIVER	34	44 (2)	0 (0)	30 (2)	0 (0)	1310 (86)	1482
	2.06	WINYAH BAY	29	58 (2)	0 (0)	12 (0)	0 (0)	2266 (93)	2416
	2.07	CHARLESTON HARBOR	100	13 (0)	0 (0)	86 (5)	0 (0)	0 (0)	1494
	2.08	NORTH AND SOUTH SANTEE	92	8 (1)	0 (0)	0 (0)	0 (0)	494 (98)	502
	2.09	ST. HELENA SOUND	76	44 (12)	0 (0)	10 (2)	0 (0)	277 (76)	364
	2.10	BROAD RIVER	58	22 (28)	0 (0)	16 (21)	0 (0)	0 (0)	76
	2.11	SAVANNAH SOUND	40	29 (2)	0 (0)	26 (2)	0 (0)	871 (73)	1189
	2.12	OSSABAW SOUND	26	8 (3)	0 (0)	33 (12)	0 (0)	98 (37)	264
	2.13	ST. CATHERINES/SAPELO	93	2 (4)	0 (0)	24 (51)	0 (0)	0 (0)	47
	2.14	ALTAMAH RIVER	7	0 (0)	0 (0)	0 (0)	0 (0)	916 (80)	916
	2.15	ST. ANDREW/ST. SIMONS	77	3 (0)	0 (0)	10 (1)	0 (0)	572 (90)	632
	2.16	ST. JOHNS RIVER	100	161 (2)	0 (0)	378 (6)	0 (0)	0 (0)	6233
	2.17	INDIAN RIVER	100	71 (7)	0 (0)	134 (14)	0 (0)	0 (0)	509
	2.18	BISCAYNE BAY	100	59 (1)	0 (0)	338 (7)	0 (0)	0 (0)	4255
	REGIONAL TOTALS			1026 (4)	0 (0)	1243 (5)	0 (0)	9210 (37)	24517

* UNITS ARE TONS/YEAR

** INCLUDES POINT TOTALS NOT LISTED

REGION	NUMBER	NAME	% EDA COVRG.	AGRIC. TOTP4 (2)	FOREST TOTP (2)	URBAN TOTP (2)	OTHER TOTP (2)	UPSTREAM TOTP (2)	TOTAL11 PHOSPH.
GULF OF MEXICO									
	3.01	TEN THOUSAND ISLANDS	75	27 (42)	2 (3)	2 (3)	2 (3)	0 (0)	63
	3.02	CHARLOTTE HARBOR	91	109 (10)	2 (0)	18 (1)	21 (2)	0 (0)	959
	3.03	TAMPA BAY	100	75 (5)	0 (0)	41 (2)	27 (1)	0 (0)	1538
	3.04	SUNANEE RIVER	100	328 (24)	10 (0)	0 (0)	0 (0)	991 (73)	1344
	3.05	APALACHEE BAY	84	191 (25)	76 (10)	5 (0)	0 (0)	298 (40)	744
	3.06	APALACHICOLA BAY	97	49 (3)	32 (2)	0 (0)	0 (0)	1248 (93)	1340
	3.07	ST. ANDREW BAY	100	13 (13)	41 (41)	5 (5)	0 (0)	0 (0)	100
	3.08	CHOCTAWHATCHEE BAY	92	169 (32)	73 (14)	5 (0)	0 (0)	249 (47)	519
	3.09	PENSACOLA BAY	69	115 (11)	115 (11)	13 (1)	0 (0)	361 (34)	981
	3.10	PERDIDO BAY	96	101 (30)	27 (8)	2 (0)	0 (0)	5 (1)	328
	3.11	MOBILE BAY	41	191 (2)	60 (0)	19 (0)	0 (0)	6808 (85)	7521
	3.12	MISSISSIPPI SOUND	56	501 (10)	126 (2)	73 (1)	0 (0)	2950 (61)	4777
	3.13	MISSISSIPPI DELTA REGION	86	1539 (7)	27 (0)	16 (0)	0 (0)	11235 (52)	21468
	3.14	ATCHAFALYA AND VERMILION	100	956 (2)	2 (0)	8 (0)	0 (0)	41726 (96)	43331
	3.15	CALCASIEU LAKE	100	326 (22)	5 (0)	5 (0)	0 (0)	243 (16)	1465
	3.16	SABINE LAKE	32	219 (11)	27 (1)	52 (2)	0 (0)	734 (38)	1908
	3.17	BALVESTON BAY	95	1087 (6)	41 (0)	82 (0)	8 (0)	1112 (8)	12603
	3.18	BRAZOS RIVER	42	2282 (21)	8 (0)	2 (0)	2 (0)	7769 (74)	10490
	3.19	MATAGORDA BAY	60	1890 (30)	38 (0)	0 (0)	471 (7)	3594 (56)	6134
	3.20	SAN ANTONIO BAY	100	104 (52)	2 (1)	0 (0)	90 (45)	0 (0)	158
	3.21	ARANSAS BAY	55	504 (55)	13 (1)	2 (0)	275 (30)	79 (8)	901
	3.22	CORPUS CHRISTI BAY	100	441 (20)	0 (0)	8 (0)	27 (1)	863 (39)	2160
	3.23	LASUNA MADRE	44	1816 (41)	13 (0)	5 (0)	1446 (36)	638 (16)	3919
REGIONAL TOTALS				12837 (10)	740 (0)	361 (0)	2373 (1)	80901 (64)	125215

WEST COAST

	4.01	SAN DIEGO BAY	100	1 (0)	0 (0)	19 (1)	0 (0)	0 (0)	1040
	4.02	SAN PEDRO BAY	98	6 (0)	1 (0)	165 (1)	0 (0)	0 (0)	8900
	4.03	SANTA MONICA BAY	100	1 (0)	0 (0)	50 (0)	6 (0)	0 (0)	15200
	4.04	MONTEREY BAY	98	33 (7)	1 (0)	35 (7)	0 (0)	0 (0)	463
	4.05	SAN FRANCISCO BAY	95	294 (2)	22 (0)	468 (3)	128 (0)	4300 (33)	12805
	4.06	EEL RIVER	76	6 (1)	7 (1)	4 (0)	19 (4)	399 (68)	451
	4.07	HUMBOLDT BAY	100	1 (1)	2 (3)	9 (17)	4 (7)	0 (0)	51
	4.08	KLAMATH RIVER	50	0 (0)	23 (2)	0 (0)	1 (0)	932 (96)	961
	4.09	COOS BAY	100	3 (3)	30 (36)	7 (8)	1 (1)	0 (0)	82
	4.10	WINCHESTER BAY	100	6 (7)	49 (63)	2 (2)	0 (0)	0 (0)	77
	4.11	COLUMBIA RIVER	64	26 (0)	66 (0)	107 (0)	0 (0)	23172 (92)	25018
	4.12	WILLAPA BAY	100	2 (2)	35 (49)	2 (2)	0 (0)	0 (0)	71
	4.13	GRAYS HARBOR	100	1 (0)	44 (14)	35 (11)	0 (0)	129 (41)	308
	4.14	PUGET SOUND	33	39 (0)	65 (1)	263 (4)	1 (0)	43 (0)	5751
REGIONAL TOTALS				419 (0)	345 (0)	1186 (1)	157 (0)	28975 (40)	71176

* UNITS ARE TONS/YEAR

** INCLUDES POINT TOTALS NOT LISTED

NATIONAL TOTALS

15299	1090	7049	2530	130191	297891
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NOTE: TOTAL PHOSPHOURS FROM AGRICULTURE
IN SAN FRANCISCO BAY (4.05) IN-
CLUDES 55 TONS FROM IRRIGATION
RETURN FLOWS.

REPORT: PH-NAT

NATIONAL ESTUARINE INVENTORY - NATIONAL COASTAL POLLUTION DISCHARGE INVENTORY

POINT SOURCES OF PHOSPHORUS BY ESTUARY - ANNUAL TOTALS

02/18/88

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REGION	NUMBER	NAME	% EDA COVRG.	WASTE WATER TRT. PLANTS TOTAL PHOSPH. 1	(% TOT)	INDUSTRY TOTAL PHOSPH.	(% TOT)	TOTAL 11 PHOSPHORUS
NORTHEAST								
	1.01	PASSAMAQUODDY BAY	43	13	(40)	0	(0)	32
	1.02	ENGLISHMAN BAY	100	12	(52)	1	(4)	23
	1.03	NARRAGUASUS BAY	100	6	(50)	0	(0)	12
	1.04	BLUE HILL BAY	97	21	(56)	2	(5)	37
	1.05	PENOBSCOT BAY	35	57	(7)	4	(0)	775
	1.06	MUSCONGUS BAY	100	10	(66)	0	(0)	15
	1.07	SHEEPSHOT BAY	16	52	(8)	0	(0)	641
	1.08	CASCO BAY	84	273	(57)	140	(29)	471
	1.09	SACO BAY	31	101	(51)	15	(7)	195
→	1.10	GREAT BAY	95	153	(75)	7	(3)	203
	1.11	MERRIMACK RIVER	30	814	(50)	2	(0)	1628
	1.12	BOSTON BAY	97	4651	(93)	7	(0)	4961
	1.13	CAPE COD BAY	100	168	(90)	0	(0)	185
	1.14	BUIZZARDS BAY	100	193	(89)	0	(0)	216
	1.15	NARRAGANSETT BAY	100	1540	(86)	4	(0)	1778
	1.16	GARDINERS BAY	100	391	(88)	16	(3)	440
	1.17	LONG ISLAND SOUND	49	4960	(66)	20	(0)	7527
	1.18	GREAT SOUTH BAY	100	3720	(89)	151	(3)	4154
	1.19	HUDSON RIVER/RARITAN BAY	79	20538	(88)	181	(0)	23160
	1.20	BARNEGAT BAY	100	289	(58)	25	(5)	494
	1.21	DELAWARE BAY	79	10691	(81)	125	(0)	13115
	1.22	CHINCOTEAGUE BAY	100	50	(60)	10	(12)	83
	1.23	CHESAPEAKE BAY	80	9649	(58)	1315	(7)	16838
REGIONAL TOTALS				58572	(76)	2025	(2)	76983
SOUTHEAST								
	2.01	ALBEMARLE SOUND	84	289	(18)	56	(3)	1588
	2.02	PAMLICO SOUND	67	117	(5)	149	(7)	1987
	2.03	ROBUE SOUND	100	26	(47)	0	(0)	55
	2.04	NEW RIVER	100	37	(31)	19	(16)	117
	2.05	CAPE FEAR RIVER	34	85	(5)	13	(0)	1482
	2.06	WINYAH BAY	29	75	(3)	5	(0)	2416
	2.07	CHARLESTON HARBOR	100	543	(36)	848	(56)	1494
	2.08	NORTH AND SOUTH SANTEE	92	0	(0)	0	(0)	502
	2.09	ST. HELENA SOUND	76	33	(9)	0	(0)	364
	2.10	BROAD RIVER	58	38	(50)	0	(0)	76
	2.11	SAVANNAH SOUND	40	249	(21)	5	(0)	1180
	2.12	OSSABAW SOUND	26	123	(46)	2	(0)	264
	2.13	ST. CATHERINES/SAPELO	93	21	(44)	0	(0)	47
	2.14	ALTAMAHA RIVER	7	0	(0)	0	(0)	916
	2.15	ST. ANDREW/ST. SIMONS	77	47	(7)	0	(0)	632
	2.16	ST. JOHNS RIVER	100	1797	(28)	3697	(62)	6233
	2.17	INDIAN RIVER	100	320	(35)	384	(42)	909
	2.18	BISCAYNE BAY	100	3857	(90)	1	(0)	4255
REGIONAL TOTALS				7659	(31)	5379	(21)	24517

1 UNITS ARE TONS/YEAR

11 INCLUDES NONPOINT TOTALS NOT LISTED

REGION	NUMBER	NAME	% EDA COVRG.	WASTE WATER TRT. PLANTS TOTAL PHOSPH. 1	(% TOT)	INDUSTRY TOTAL PHOSPH.	(% TOT)	TOTAL 11 PHOSPHORUS
GULF OF MEXICO								
	3.01	TEN THOUSAND ISLANDS	75	30	(47)	0	(0)	63
	3.02	CHARLOTTE HARBOR	91	167	(16)	684	(62)	999
	3.03	TAMPA BAY	100	890	(57)	492	(32)	1535
	3.04	SUNWANE RIVER	100	5	(0)	10	(0)	1344
	3.05	APALACHEE BAY	84	164	(22)	10	(1)	744
	3.06	APALACHICOLA BAY	97	13	(0)	0	(0)	1340
	3.07	ST. ANDREW BAY	100	41	(41)	0	(0)	100
	3.08	CHOCTAWHATCHEE BAY	92	21	(4)	2	(0)	519
	3.09	PENSACOLA BAY	69	183	(18)	194	(19)	981
	3.10	PERDIDO BAY	96	35	(10)	158	(48)	328
	3.11	MOBILE BAY	41	372	(4)	471	(5)	7921
	3.12	MISSISSIPPI SOUND	56	947	(19)	180	(3)	4777
	3.13	MISSISSIPPI DELTA REGION	88	1380	(6)	7268	(33)	21465
	3.14	ATCHAFALYA AND VERMILION	100	317	(0)	312	(0)	43321
	3.15	CALCASIEU LAKE	100	95	(6)	791	(53)	1465
	3.16	SABINE LAKE	32	246	(12)	630	(33)	1908
	3.17	GALVESTON BAY	98	4350	(36)	5723	(45)	12603
	3.18	BRAZOS RIVER	42	101	(0)	326	(3)	10490
	3.19	MATAGORDA BAY	60	35	(0)	106	(1)	6134
	3.20	SAN ANTONIO BAY	100	2	(1)	0	(0)	199
	3.21	ARANSAS BAY	55	24	(2)	0	(0)	901
	3.22	CORPUS CHRISTI BAY	100	457	(21)	364	(16)	2160
	3.23	LAGUNA MADRE	44	84	(2)	117	(2)	3919
REGIONAL TOTALS				16158	(8)	17844	(14)	125215

57

	4.01	SAN DIEGO BAY	100	1012	(97)	8	(0)	1040
	4.02	SAN PEDRO BAY	58	8719	(97)	9	(0)	8900
	4.03	SANTA MONICA BAY	100	15092	(99)	51	(0)	15200
	4.04	MONTEREY BAY	98	393	(64)	1	(0)	463
	4.05	SAN FRANCISCO BAY	95	7582	(59)	14	(0)	12605
	4.06	EEL RIVER	76	16	(3)	0	(0)	451
	4.07	HUMBOLDT BAY	100	35	(65)	0	(0)	51
	4.08	KLAMATH RIVER	50	0	(0)	5	(0)	961
	4.09	COOS BAY	100	37	(45)	4	(4)	82
	4.10	WINCHESTER BAY	100	19	(24)	1	(1)	77
	4.11	COLUMBIA RIVER	64	1694	(6)	41	(0)	25016
	4.12	WILLAPA BAY	100	30	(42)	2	(2)	71
	4.13	GRAYS HARBOR	100	88	(28)	11	(3)	306
	4.14	PUGET SOUND	33	5230	(90)	90	(1)	5751
REGIONAL TOTALS				39857	(55)	237	(0)	71176

1 UNITS ARE TONS/YEAR

11 INCLUDES NONPOINT TOTALS NOT LISTED

NATIONAL TOTALS

116247

25485

297891

REPORT: FT-NATP

NATIONAL ESTUARINE INVENTORY - NATIONAL COASTAL POLLUTION DISCHARGE INVENTORY

NONPOINT SOURCES OF NITROGEN BY ESTUARY - ANNUAL TOTALS

02/18/88

PAGE 1

REGION	NUMBER	NAME	% EDA COVERS	AGRIC. TOTAL (1)	FOREST TOTAL (2)	URBAN TOTAL (3)	OTHER TOTAL (4)	UPSTREAM TOTAL (5)	TOTAL NITRO
NORTHEAST									
	1.01	PASSAMAGUDDY BAY	43	86 (29)	19 (6)	86 (29)	1 (0)	0 (0)	294
	1.02	ENGLISHMAN BAY	100	65 (43)	15 (9)	42 (27)	2 (1)	0 (0)	151
	1.03	NARRAGANSETT BAY	100	62 (58)	8 (7)	20 (18)	3 (2)	0 (0)	108
	1.04	BLUE HILL BAY	97	16 (10)	10 (6)	77 (49)	4 (2)	0 (0)	155
	1.05	PENOBSCOT BAY	35	59 (0)	147 (1)	143 (1)	3 (0)	7280 (93)	7806
	1.06	MUSCONGUS BAY	100	27 (46)	0 (0)	17 (29)	0 (0)	0 (0)	58
	1.07	SHEEPSHOTT BAY	16	253 (2)	32 (0)	188 (2)	1 (0)	8190 (93)	8741
	1.08	CASCO BAY	84	367 (25)	30 (2)	270 (19)	0 (0)	0 (0)	1418
	1.09	SACO BAY	31	58 (4)	2 (0)	133 (10)	0 (0)	875 (69)	1254
→	1.10	GREAT BAY	95	166 (25)	4 (0)	227 (35)	0 (0)	0 (0)	640
	1.11	MERRIMACK RIVER	30	83 (0)	0 (0)	531 (5)	0 (0)	8150 (80)	10111
	1.12	BOSTON BAY	97	17 (0)	0 (0)	1794 (19)	0 (0)	0 (0)	9305
	1.13	CAFE COD BAY	100	3 (0)	0 (0)	108 (28)	2 (0)	0 (0)	360
	1.14	BUZZARDS BAY	100	38 (8)	0 (0)	124 (26)	1 (0)	0 (0)	489
	1.15	NARRAGANSETT BAY	100	345 (7)	1 (0)	1363 (29)	4 (0)	0 (0)	4574
	1.16	GARDINERS BAY	100	158 (16)	0 (0)	183 (18)	0 (0)	0 (0)	585
	1.17	LONG ISLAND SOUND	49	1827 (3)	61 (0)	3639 (7)	1 (0)	24627 (49)	50148
	1.18	GREAT SOUTH BAY	100	250 (3)	0 (0)	1741 (21)	0 (0)	0 (0)	8109
	1.19	HUDSON RIVER/RARITAN BAY	79	7221 (10)	230 (0)	5707 (8)	0 (0)	21030 (30)	68743
	1.20	BARNEGAT BAY	100	137 (8)	0 (0)	1080 (53)	0 (0)	0 (0)	2032
	1.21	DELAWARE BAY	75	1630 (3)	0 (0)	2595 (5)	0 (0)	27190 (54)	50104
	1.22	CHINCOTEAGUE BAY	100	179 (61)	0 (0)	5 (1)	0 (0)	0 (0)	293
	1.23	CHESAPEAKE BAY	89	4732 (3)	216 (0)	6031 (5)	0 (0)	87302 (72)	120036
		REGIONAL TOTALS		17779 (5)	775 (0)	26104 (7)	22 (0)	184644 (33)	345914
SOUTHEAST									
	2.01	ALBEMARLE SOUND	84	3101 (23)	0 (0)	528 (3)	0 (0)	9284 (66)	13471
	2.02	PAMLICO SOUND	67	5335 (38)	2 (0)	138 (0)	0 (0)	8940 (60)	14759
	2.03	BOQUE SOUND	100	633 (89)	1 (0)	11 (1)	0 (0)	0 (0)	710
	2.04	NEW RIVER	100	266 (43)	0 (0)	264 (42)	0 (0)	0 (0)	617
	2.05	CAFE FEAR RIVER	34	470 (5)	0 (0)	197 (2)	0 (0)	7260 (89)	8101
	2.06	WINYAH BAY	29	564 (2)	2 (0)	77 (0)	0 (0)	22630 (96)	22792
	2.07	CHARLESTON HARBOR	100	101 (3)	1 (0)	579 (18)	0 (0)	0 (0)	3048
	2.08	NORTH AND SOUTH SANTEE	92	73 (1)	0 (0)	0 (0)	0 (0)	6650 (98)	6723
	2.09	ST. HELENA SOUND	76	397 (16)	0 (0)	66 (2)	0 (0)	1940 (78)	2457
	2.10	BROAD RIVER	58	190 (52)	0 (0)	105 (29)	0 (0)	0 (0)	359
	2.11	SAVANNAH SOUND	40	150 (1)	0 (0)	173 (1)	0 (0)	7710 (88)	8697
	2.12	OSSABAW SOUND	26	27 (1)	0 (0)	217 (13)	0 (0)	1070 (65)	1633
	2.13	ST. CATHERINES/SAPELO	93	7 (3)	0 (0)	159 (78)	0 (0)	0 (0)	202
	2.14	ALTAMHA RIVER	7	1 (0)	0 (0)	0 (0)	0 (0)	6750 (99)	6751
	2.15	ST. ANDREW/ST. SIMONS	77	14 (0)	1 (0)	62 (1)	0 (0)	5230 (95)	5504
	2.16	ST. JOHNS RIVER	100	1891 (17)	42 (0)	2479 (22)	0 (0)	0 (0)	10827
	2.17	INDIAN RIVER	100	788 (29)	0 (0)	800 (29)	0 (0)	0 (0)	2701
	2.18	BISCAYNE BAY	100	1046 (11)	0 (0)	2222 (23)	0 (0)	0 (0)	9447
		REGIONAL TOTALS		15084 (12)	49 (0)	8077 (6)	0 (0)	76864 (64)	118859

1 UNITS ARE TONS/YEAR

11 INCLUDES POINT TOTALS NOT LISTED

REGION	NUMBER	NAME	2 EDA COVRS.	AGRIC. TOTN* (2)	FOREST TOTN (2)	URBAN TOTN (2)	OTHER TOTN (2)	UPSTREAM TOTN (2)	TOTAL** NOTED
GULF OF MEXICO									
	3.01	TEN THOUSAND ISLANDS	75	219 (35)	24 (3)	19 (3)	106 (17)	0 (0)	614
	3.02	CHARLOTTE HARBOR	91	1405 (56)	49 (1)	145 (5)	128 (5)	0 (0)	2492
	3.03	TAMPA BAY	100	712 (14)	150 (3)	509 (10)	230 (4)	0 (0)	4902
	3.04	SUNANEE RIVER	100	750 (20)	82 (2)	10 (0)	0 (0)	2805 (74)	3741
	3.05	APALACHEE BAY	84	1641 (32)	1106 (21)	54 (1)	0 (0)	846 (16)	5049
	3.06	APALACHICOLA BAY	97	652 (5)	400 (3)	8 (0)	0 (0)	9980 (85)	11097
	3.07	ST. ANDREW BAY	100	167 (14)	652 (57)	54 (4)	0 (0)	0 (0)	1143
	3.08	CHOCTAWHATCHEE BAY	92	2082 (37)	890 (16)	57 (1)	0 (0)	2367 (42)	5512
	3.09	PENSACOLA BAY	69	1432 (18)	1364 (17)	123 (1)	0 (0)	3454 (45)	7942
	3.10	PERDIDO BAY	96	1260 (65)	342 (17)	27 (1)	0 (0)	65 (3)	1923
	3.11	MOBILE BAY	41	2345 (5)	715 (1)	191 (0)	0 (0)	36427 (65)	42625
	3.12	MISSISSIPPI SOUND	56	4038 (11)	1268 (3)	712 (2)	0 (0)	23109 (67)	34065
	3.13	MISSISSIPPI DELTA REGION	88	2758 (0)	41 (0)	150 (0)	0 (0)	440120 (93)	468928
	3.14	ATCHAFALYA AND VERMILION	100	5095 (2)	8 (0)	79 (0)	0 (0)	165904 (73)	178063
	3.15	CALCASIEU LAKE	100	742 (7)	16 (0)	57 (0)	0 (0)	2479 (24)	10057
	3.16	SABINE LAKE	32	745 (5)	104 (0)	287 (2)	0 (0)	9627 (69)	13847
	3.17	BALVESTON BAY	98	4219 (8)	150 (0)	720 (1)	32 (0)	4939 (9)	50588
	3.18	BRAZOS RIVER	42	958 (7)	27 (0)	16 (0)	13 (0)	7213 (52)	13628
	3.19	MATAGORDA BAY	60	7652 (58)	142 (1)	8 (0)	1783 (13)	3339 (24)	13369
	3.20	SAN ANTONIO BAY	100	446 (55)	10 (1)	0 (0)	339 (42)	0 (0)	805
	3.21	ARKANSAS BAY	55	2559 (64)	52 (1)	27 (0)	1052 (26)	73 (1)	3923
	3.22	CORPUS CHRISTI BAY	100	2058 (30)	2 (0)	76 (1)	101 (1)	802 (11)	8867
	3.23	LAGUNA MADRE	44	9157 (45)	54 (0)	60 (0)	8208 (42)	1013 (5)	19096
	REGIONAL TOTALS			55232 (5)	7648 (0)	3389 (0)	11992 (1)	714561 (79)	900477

WEST COAST

	4.01	SAN DIEGO BAY	100	29 (2)	3 (0)	122 (8)	0 (0)	0 (0)	1364
	4.02	SAN PEDRO BAY	98	108 (0)	78 (0)	1082 (8)	13 (0)	0 (0)	12120
	4.03	SANTA MONICA BAY	100	14 (0)	29 (0)	328 (1)	554 (2)	0 (0)	18818
	4.04	MONTEREY BAY	98	879 (47)	136 (7)	230 (12)	31 (1)	0 (0)	1846
	4.05	SAN FRANCISCO BAY	95	12642 (17)	2371 (3)	3002 (4)	12418 (17)	29800 (41)	71187
	4.06	EEL RIVER	76	15 (0)	722 (20)	24 (0)	1930 (55)	740 (21)	3461
	4.07	HUMBOLDT BAY	100	4 (0)	172 (23)	62 (8)	431 (52)	0 (0)	735
	4.08	KLAMATH RIVER	50	0 (0)	2285 (17)	0 (0)	113 (0)	10358 (81)	12757
	4.09	COOS BAY	100	276 (7)	3033 (86)	42 (1)	65 (1)	0 (0)	3493
	4.10	WINCHESTER BAY	100	357 (6)	4924 (91)	11 (0)	40 (0)	0 (0)	5377
	4.11	COLUMBIA RIVER	64	1996 (0)	6490 (2)	670 (0)	41 (0)	268650 (95)	281216
	4.12	WILLAPA BAY	100	148 (3)	3524 (93)	12 (0)	3 (0)	0 (0)	3755
	4.13	GRAYS HARBOR	100	38 (0)	4355 (55)	226 (2)	1 (0)	2890 (36)	7816
	4.14	PUGET SOUND	33	1254 (6)	6983 (38)	1822 (10)	56 (0)	326 (1)	18105
	REGIONAL TOTALS			17742 (4)	35105 (7)	7633 (1)	15736 (3)	312764 (70)	442652

* UNITS ARE TONS/YEAR

** INCLUDES POINT TOTALS NOT LISTED

NATIONAL TOTALS

103897	43577	45203	27750	1288334	1807302
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NOTE: TOTAL NITROGEN FROM AGRICULTURE
IN SAN FRANCISCO BAY (4.05) IN-
CLUDES 5,754 TONS FROM IRRIGATION
RETURN FLOWS.

REPORT: NATION

NATIONAL ESTUARINE INVENTORY - NATIONAL COASTAL POLLUTION DISCHARGE INVENTORY

POINT SOURCES OF NITROGEN BY ESTUARY - ANNUAL TOTALS

02/18/89

PAGE 1

REGION	NUMBER	NAME	% ED4 COVRO.	WASTE WATER TRT. PLANTS TOTAL NITROGEN (% TOT)	INDUSTRY TOTAL NITROGEN (% TOT)	TOTAL** NITROGEN
NORTHEAST						
	1.01	PASSAMAGUODDY BAY	43	18 (6)	84 (28)	294
	1.02	ENGLISHMAN BAY	100	17 (11)	10 (6)	151
	1.03	NARRAGUAGUS BAY	100	8 (7)	5 (4)	106
	1.04	BLUE HILL BAY	97	30 (19)	18 (11)	155
	1.05	PENOBSCOT BAY	35	77 (0)	99 (1)	7808
	1.06	MUSCONGUS BAY	100	13 (22)	1 (1)	58
	1.07	SHEEPSHOT BAY	16	67 (0)	10 (0)	8741
	1.08	CASCO BAY	64	408 (28)	343 (24)	1418
	1.09	SACO BAY	31	149 (11)	37 (2)	1254
	→ 1.10	GREAT BAY	95	230 (35)	13 (2)	640
	1.11	MERRIMACK RIVER	30	1310 (12)	37 (0)	10111
	1.12	BOSTON BAY	57	7481 (80)	33 (0)	9305
	1.13	CAPE COD BAY	100	267 (70)	0 (0)	380
	1.14	BUZZARDS BAY	100	306 (65)	0 (0)	469
	1.15	NARRAGANSETT BAY	100	2470 (54)	391 (8)	4574
	1.16	GARDINERS BAY	100	628 (63)	16 (1)	985
	1.17	LONG ISLAND SOUND	49	18922 (37)	1071 (2)	50148
	1.18	GREAT SOUTH BAY	100	5970 (73)	148 (1)	8109
	1.19	HUDSON RIVER/RARITAN BAY	75	32332 (47)	2223 (3)	68743
	1.20	BARNEGAT BAY	100	455 (22)	360 (17)	2032
	1.21	DELAWARE BAY	79	17076 (34)	1613 (3)	50104
	1.22	CHINCOTEAGUE BAY	100	78 (26)	31 (10)	293
	1.23	CHESAPEAKE BAY	80	15705 (13)	6050 (5)	120036
		REGIONAL TOTALS		103997 (30)	12593 (3)	345914
SOUTHEAST						
	2.01	ALBEMARLE SOUND	84	451 (3)	107 (0)	13471
	2.02	PAMLICO SOUND	67	176 (1)	168 (1)	14759
	2.03	ROBUE SOUND	100	38 (5)	27 (3)	710
	2.04	NEW RIVER	100	54 (8)	33 (5)	617
	2.05	CAPE FEAR RIVER	34	127 (1)	47 (0)	8101
	2.06	WINYAH BAY	29	107 (0)	12 (0)	22792
	2.07	CHARLESTON HARBOR	100	638 (27)	1529 (50)	3048
	2.08	NORTH AND SOUTH SANTEE	92	0 (0)	0 (0)	6723
	2.09	ST. HELENA SOUND	76	49 (1)	5 (0)	2457
	2.10	BROAD RIVER	58	57 (15)	7 (1)	359
	2.11	SAVANNAH SOUND	40	391 (4)	273 (3)	8697
	2.12	OSSABAW SOUND	26	189 (11)	130 (7)	1633
	2.13	ST. CATHERINES/SAPELO	93	30 (14)	6 (2)	202
	2.14	ALTAMAH RIVER	7	0 (0)	0 (0)	6751
	2.15	ST. ANDREW/ST. SIMONS	77	73 (1)	124 (2)	5504
	2.16	ST. JOHN'S RIVER	100	2814 (25)	3661 (33)	10887
	2.17	INDIAN RIVER	100	494 (18)	619 (22)	2701
	2.18	BISCAYNE BAY	100	6176 (65)	3 (0)	9447
		REGIONAL TOTALS		12064 (10)	6751 (5)	118959

* UNITS ARE TONS/YEAR

** INCLUDES NONPOINT TOTALS NOT LISTED

REGION	NUMBER	NAME	% EDA COVRG.	WASTE WATER TRT. PLANTS TOTAL NITROGEN# (1 TOT)	INDUSTRY TOTAL NITROGEN (1 TOT)	TOTAL** NITROGEN
GULF OF MEXICO						
	3.01	TEN THOUSAND ISLANDS	75	246 (40)	0 (0)	614
	3.02	CHARLOTTE HARBOR	91	624 (24)	147 (5)	2478
	3.03	TAMPA BAY	100	2164 (43)	1197 (24)	4962
	3.04	SUNWEE RIVER	100	21 (0)	73 (1)	3741
	3.05	APALACHEE BAY	84	863 (17)	539 (10)	5049
	3.06	APALACHICOLA BAY	97	57 (0)	0 (0)	11097
	3.07	ST. ANDREW BAY	100	265 (23)	2 (0)	1140
	3.08	CHOCTAWHATCHEE BAY	92	106 (1)	16 (0)	5518
	3.09	PENSACOLA BAY	69	827 (10)	742 (9)	7942
	3.10	PERDIDO BAY	96	142 (7)	87 (4)	1923
	3.11	MOBILE BAY	41	2046 (4)	901 (2)	42625
	3.12	MISSISSIPPI SOUND	56	4424 (12)	534 (1)	34085
	3.13	MISSISSIPPI DELTA REGION	88	5432 (1)	20487 (4)	468968
	3.14	ATCHAFALYA AND VERMILION	100	1084 (0)	5983 (3)	178043
	3.15	CALCASIEU LAKE	100	673 (6)	6120 (60)	10067
	3.16	SABINE LAKE	32	1202 (8)	1882 (13)	13647
	3.17	GALVESTON BAY	98	25789 (50)	14739 (29)	50566
	3.18	BRAIDE RIVER	42	547 (4)	4854 (35)	13628
	3.19	MATAGORDA BAY	60	238 (1)	27 (0)	18385
	3.20	SAN ANTONIO BAY	100	10 (1)	0 (0)	883
	3.21	ARANSAS BAY	55	160 (4)	0 (0)	3923
	3.22	CORPUS CHRISTI BAY	100	3123 (45)	695 (10)	6567
	3.23	LAGUNA MADRE	44	347 (1)	215 (1)	19075
REGIONAL TOTALS				50410 (5)	59244 (6)	900477

WEST COAST

	4.01	SAN DIEGO BAY	100	1172 (85)	38 (2)	1364
	4.02	SAN PEDRO BAY	98	10738 (89)	43 (0)	12120
	4.03	SANTA MONICA BAY	100	17656 (93)	237 (1)	18819
	4.04	MONTEREY BAY	95	512 (27)	58 (3)	1846
	4.05	SAN FRANCISCO BAY	93	10567 (14)	367 (0)	71187
	4.06	EEL RIVER	76	28 (0)	0 (0)	3461
	4.07	HUMBOLDT BAY	100	44 (5)	22 (2)	735
	4.08	KLAMATH RIVER	50	1 (0)	0 (0)	12757
	4.09	COOS BAY	100	60 (1)	17 (0)	3493
	4.10	WINCHESTER BAY	100	27 (0)	18 (0)	5377
	4.11	COLUMBIA RIVER	64	2555 (0)	816 (0)	261216
	4.12	WILLAPA BAY	100	37 (0)	31 (0)	3755
	4.13	GRAYS HARBOR	100	137 (1)	169 (2)	7816
	4.14	PUGET SOUND	33	6531 (36)	1113 (6)	18105
REGIONAL TOTALS				50143 (11)	2929 (0)	442052

1 UNITS ARE TONS/YEAR

** INCLUDES NONPOINT TOTALS NOT LISTED

NATIONAL TOTALS

216614

81517

1807302

REPORT: PT-NAT

APPENDIX G

***“How Safe is the Fish We Eat”,
by the New Hampshire Department
of Health and Human Services***

The recommendations on the previous panel pertain only to potential chemical contamination. Other advisories may at times be issued because of Red Tide or bacterial contamination. Check with state or local authorities if you have any doubts about the fish or shellfish you plan to eat.

FOR MORE INFORMATION

Consumption Advisories
call 603-271-4664
or 800-852-3345 ext. 4664
NH Division of Public Health Services

Red Tide Closures
call 603-271-2501
NH Fish & Game Department

Nutrition
NHDPHS Bureau of Health Promotion
or your dietitian

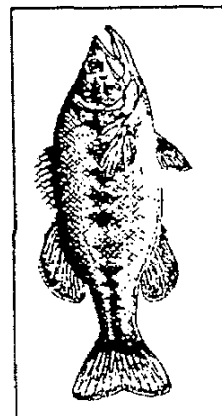
NH Division of Public Health Services
Bureau of Health Risk Assessment
6 Hazen Drive
Concord, NH 03301
603-271-4664
800-852-3345 ext: 4664

12/95

SPEAKING OF RISKS

#5

How Safe is
the Fish We Eat



WHAT ARE THE BENEFITS OF EATING FISH?

Fish are high in protein and low in saturated fat and cholesterol. A diet low in fat contains fewer calories. It also may play a part in reducing the likelihood of certain cancers, particularly those of the breast, colon, lining of the uterus, and prostate gland. Some scientists believe that certain substances found in fish may help prevent heart disease.

COULD THERE BE CONTAMINANTS IN THE FISH I EAT?

Yes. Fish, like other living things, sometimes accumulate toxic chemicals from the environment. However, health experts believe the benefits of eating fish outweigh the possible risks, especially if consumers follow preparation guidelines such as the ones in this pamphlet. The National Institutes of Health encourage Americans to include fish more often in their diets.

WHAT TYPES OF CHEMICALS HAVE BEEN FOUND IN FISH?

PCB's, a potential cancer causing group of chemicals, have been found in fish worldwide. Other common pollutants include mercury, cadmium, and DDT. Typically, these contaminants are found at low levels.

ARE ALL FISH EQUALLY LIKELY TO BE CONTAMINATED?

No. As you might expect, fish living in water known to be polluted are more likely to be contaminated than fish that live further from sources of pollution, like haddock and cod. An exception would be mercury, which has been detected at elevated levels in fish caught from various remote freshwater bodies in NH and other states.

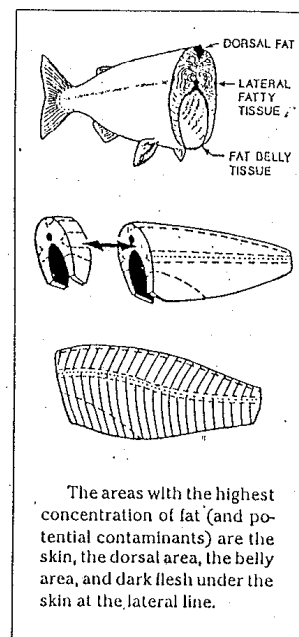
Also, oily fish such as bluefish tend to accumulate fat soluble chemicals such as PCB's. Older, bigger fish are more likely to contain contaminants than smaller, younger fish.

WHAT HAVE NEW HAMPSHIRE STUDIES FOUND?


The NH Division of Public Health Services has analyzed fish and shellfish taken from the Great Bay Estuary and the Androscoggin, Connecticut, and Nashua rivers. Lobsters, clams, trout, bass, wall-eye pike, perch, and suckers were among the species studied. Chemicals found included dioxins, PCB's, mercury, and lead. Similar results have been found in studies conducted in other states.

HOW CAN I REDUCE THE AMOUNT OF CONTAMINANTS IN THE FISH I EAT?

First, choose young, small fish. Remove the skin and cut away other fatty areas (see illustration). To allow juices to drip away, the fish should be broiled, barbecued, or baked on a rack. Frying fish retains the fat-laden juices. If you are cooking lobster, be aware that the tomalley has a higher concentration of PCB's than the meat. Pregnant and breastfeeding women are advised to avoid eating tomalley. The fish still contains some saturated fat and cholesterol, so the amount you eat is important. The recommended amount of meat, poultry, fish or shellfish is up to 6 ounces each day. If more filling dishes are desired, extend your meal with pasta or vegetables.



The New Hampshire Division of Public Health Services offers these recommendations.

	Who we're concerned about	Species of concern	Recommendations
GENERAL ADVISORY FOR ALL INLAND FRESHWATER BODIES	<ul style="list-style-type: none"> ● Women of Reproductive Age ● Children 6 years of Age or younger ● All other consumers 	All species All species All species	Limit to one 8-oz.meal per month Limit to one 3-oz meal per month Limit to four 8-oz meals per month
ANDROSCOGGIN RIVER (from Berlin to the Maine border)	<ul style="list-style-type: none"> ● Pregnant and nursing women ● All other consumers 	All species All species	Avoid consumption Limit to one or two 8-oz. meals/year
GREAT BAY ESTUARY	<ul style="list-style-type: none"> ● Pregnant and nursing women ● Children under 15 ● All other consumers 	Lobster (1) Bluefish (2) Lobster (1) Bluefish (2) Lobster (1) Bluefish (2)	(1) Limit consumption; avoid tomalley (2) Avoid consumption (1) Limit consumption of tomalley (2) Avoid consumption (1) Limit consumption of tomalley (2) Avoid fish over 20 in. or 4 lbs; prepare according to guidelines
CONNECTICUT RIVER	<ul style="list-style-type: none"> ● All consumers 	All species	Prepare according to guidelines
HORSESHOE POND	<ul style="list-style-type: none"> ● All consumers 	Largemouth Bass	Avoid Consumption

APPENDIX H

***New Hampshire
Ambient Groundwater
Quality Standards***

(q) "Regulated contaminant" means "regulated contaminant" as defined in RSA 485-C:12, XIII, namely "any physical, chemical, biological, radiological substance or other matter, other than naturally occurring substances at naturally occurring levels, in water which adversely affects human health or the environment."

(r) "Regulated substance" means either:

(1) "Oil" as defined in RSA 146-A:2, III; or

(2) A substance listed in 40 CFR 302, 7-1-90 edition, with the following exclusions:

- a. Ammonia;
 - b. Sodium hypochlorite;
 - c. Sodium hydroxide;
 - d. Acetic acid;
 - e. Sulfuric acid;
 - f. Potassium hydroxide; and
 - g. Potassium permanganate.
-

Env-Ws 1503.03 Ambient Groundwater Quality Standards.

(a) Pursuant to RSA 485-C:6, ambient groundwater quality standards shall apply to all regulated contaminants which result from human operations or activities. Ambient groundwater quality standards shall not apply to naturally occurring contaminants.

(b) For purposes of this section, the following definitions shall apply:

- (1) CAS No. means the chemical abstract service number;
- (2) ug/L means micrograms per liter; and
- (3) pCi/L means picocuries per liter.

(c) The following criteria shall apply to Table 1500-1:

- (1) Alkylbenzenes shall include 1,2,4 trimethyl benzene, 1,3,5 trimethyl benzene, n-propyl benzene, n-butyl benzene, 4-isopropyl toluene, tert-butyl benzene and sec-butyl benzene. The sum of the total of these compounds shall be compared to the ambient groundwater quality standard;
- (2) If current SW 846 quantitation limits are greater than 0.05 ug/l, then the lowest achievable detection limit shall be the ambient groundwater quality standard for benzo(a)anthracene;
- (3) If current SW 846 quantitation limits are greater than 0.2 ug/l, then the lowest achievable detection limit shall be the ambient groundwater quality standard for benzo(a)pyrene;

- (4) If current SW 846 quantitation limits are greater than 0.05 ug/l, then the lowest achievable detection limit shall be the ambient groundwater quality standard for benzo(b)fluoranthene;
- (5) If current SW 846 quantitation limits are greater than 0.5 ug/l, then the lowest achievable detection limit shall be the ambient groundwater quality standard for benzo(k)fluoranthene;
- (6) If current SW 846 quantitation limits are greater than 4 ug/l, then the lowest achievable detection limit shall be the ambient groundwater quality standard for bromoform;
- (7) Positives for total coliform shall be confirmed by the presence of other wastewater parameters, including, but not limited to, fecal coliform, Escherichia coli, fecal streptococcus, nitrates, and chlorides;
- (8) If current SW 846 quantitation limits are greater than 5 ug/l, then the lowest achievable detection limit shall be the ambient groundwater quality standard for chrysene;
- (9) If current SW 846 quantitation limits are greater than 0.005 ug/l, then the lowest achievable detection limit shall be the ambient groundwater quality standard for dibenzo(a,h)anthracene;
- (10) If current SW 846 quantitation limits are greater than 0.2 ug/l, then the lowest achievable detection limit shall be the ambient groundwater quality standard for 1,3-dichloropropene;
- (11) If current SW 846 quantitation limits are greater than 14 ug/l, then the lowest achievable detection limit shall be the ambient groundwater quality standard for 2,4- dinitrophenol;
- (12) If current SW 846 quantitation limits are greater than 0.05 ug/l, then the lowest achievable detection limit shall be the ambient groundwater quality standard for indeno(1,2,3-cd)pyrene; and
- (13) The standard for total trihalomethanes shall be 100 ug/l if the groundwater is affected by chlorinated water supplies.

(d) Ambient groundwater quality standards shall be as set forth in Table 1500-1 below:

<p>Table 1500-1</p> <p>AMBIENT GROUNDWATER QUALITY STANDARDS</p>		
Chemical Name	CAS No.	NH GW-1 ug/l (ppb)
Acenaphthene	83-32-9	420
Acenaphthylene	208-96-8	420
Acetone	67-64-1	700
Acrylonitrile	107-13-1	5
Alachor	15972-60-8	2
Aldicarb	116-06-3	3
Aldicarb sulfone	1646-88-4	2
Aldicarb sulfoxide	1646-87-3	4
Aldrin	309-00-2	0.04
Alkyl benzenes		50
Alkyl chloride	107-05-1	7.4
Anthracene	120-12-7	2,100

<p>Table 1500-1</p> <p>AMBIENT GROUNDWATER QUALITY STANDARDS</p>		
Chemical Name	CAS No.	NH GW-1 ug/l (ppb)
Antimony	7440-36-0	6
Arsenic	7440-38-2	50
Atrazine	1912-24-9	3
Barium	7440-39-3	2,000
Benzene	71-43-2	5
Benzidine	92-87-5	0.8
Benzo(a)anthracene	56-55-3	0.05
Benzo(a)pyrene	50-32-8	0.2
Benzo(b)fluoranthene	205-99-2	0.05
Benzo(g,h,i)perylene	191-24-2	210
Benzo(k)fluoranthene	207-08-9	0.5
Benzoic Acid	65-85-0	28,000
Beryllium	7440-41-7	4
Biphenyl, 1,1-	92-52-4	350
Boron	7440-42-8	620
Bromodichloromethane	75-27-4	0.3
Bromoform	75-25-2	4
Bromomethane	74-83-9	10
Cadmium	7440-43-9	5
Camphor	76-22-2	200
Carbofuran	1563-66-2	40
Carbon disulfide	75-15-0	7
Carbon tetrachloride	56-23-5	5
Chlordane	57-74-9	2
Chloroaniline, p-	106-47-8	28
bis-(2-chloroethyl)ether	111-44-4	10
bis-(2-chloroisopropyl)ether	39638-32-9	300
bis-(chloromethyl)ether	542-88-1	10
Chloromethane	74-87-3	3
Chlorophenol, 2-	95-57-8	35
Chlorotoluene	95-49-8	100
Chromium (Total)	7440-47-3	100
Chrysene	218-01-9	5
Clopyralid (Stinger 3SC)	1702-17-6	3500
Copper	7440-50-8	1300
Cyanide	57-12-5	200
Cyanizine(Bladex 4L/90DF)	21725-46-2	1
2,4-D (Dichlorophenoxyacetic acid, 2,4-)	94-75-7	70
Dalapon	75-99-0	200
DDD (Dichlorodiphenyl dichloroethane, p,p')	72-54-8	0.1
DDE (Dichlorodiphenyl dichloroethylene, p,p')	72-55-9	0.1
DDT (Dichlorodiphenyl trichloroethane, p,p')	50-29-3	0.1
Dibenzo(a,h)anthracene	53-70-3	0.005
Dibromochloromethane	124-48-1	0.3

<p>Table 1500-1</p> <p>AMBIENT GROUNDWATER QUALITY STANDARDS</p>		
Chemical Name	CAS No.	NH GW-1 ug/l (ppb)
Dibromochloropropane	96-12-8	0.2
Dibutylphthalate	84-74-2	34,000
Dichlorobenzene, 1,2- (o-DCB)	95-50-1	600
Dichlorobenzene, 1,3- (m-DCB)	541-73-1	600
Dichlorobenzene, 1,4- (p-DCB)	106-46-7	75
Dichlorobenzidine, 3,3'-	91-94-1	1.3
Dichlorodifluoromethane	75-71-8	1,000
Dichloroethane, 1,1-	75-34-3	81
Dichloroethane, 1,2-	107-06-2	5
Dichloroethylene, 1,1-	75-35-4	7
Dichloroethylene, cis-1,2-	156-59-2	70
Dichloroethylene, trans-1,2-	156-60-5	100
Dichloromethane (Methylene chloride)	75-09-2	5
Dichlorophenol, 2,4-	120-83-2	21
Dichloropropane, 1,2-	78-87-5	5
Dichloropropene, 1,3-	542-75-6	0.2
Dieldrin	60-57-1	0.002
Di(ethylhexyl)adipate	103-23-1	400
Di(ethylhexyl)phthalate (bis-(2-ethylhexyl)phthalate)	117-81-7	6
Dimethyl phthalate	131-11-3	50,000
Dimethylphenol, 2,4-	105-67-9	140
Dinitrophenol, 2,4-	51-28-5	14
Dinitrotoluene, 2,4-	121-14-2	10
Dinoseb	88-85-7	7
1,2-Diphenylhydrazine	122-66-7	10
Diquat	85-00-7	20
Endosulfan	115-29-7	42
Endothall	145-73-3	100
Endrin	72-20-8	2
Ethylbenzene	100-41-4	700
Ethylene dibromide	106-93-4	0.05
Ethylene glycol	107-21-1	7,000
Fluoranthene	206-44-0	280
Fluorene	86-73-7	280
Fluoride	16984-48-8	4,000
Glyphosate	1071-83-6	700
Gross alpha radionuclides		15 pCi/L
Heptachlor	76-44-8	0.4
Heptachlor epoxide	1024-57-3	0.2
Hexachlorobenzene	118-74-1	1
Hexachlorobutadiene	87-68-3	0.5
Hexachlorocyclohexane, alpha	319-84-6	0.006
Hexachlorocyclohexane, beta	319-85-7	0.02

<p>Table 1500-1</p> <p>AMBIENT GROUNDWATER QUALITY STANDARDS</p>		
Chemical Name	CAS No.	NH GW-1 ug/l (ppb)
Hexachlorocyclohexane, gamma (Lindane)	58-89-9	0.02
Hexachlorocyclopentadiene	77-47-4	50
Hexachlorodibenzodioxin	34465-46-8	0.0221
Hexachloroethane	67-72-1	1.9
Indeno(1,2,3-cd)pyrene	193-39-5	0.05
Isophorone	78-59-1	100
Isopropyl benzene	98-82-8	280
Lead	7439-92-1	15
Mercury	7439-97-6	2
Methoxychlor	72-43-5	40
Methyl ethyl ketone (MEK)	78-93-3	170
Methyl isobutyl ketone (MIBK)	108-10-1	350
Methylnaphthalene, 2-	91-57-6	280
Methyl phenol, 2- (o-cresol)	95-48-7	350
Methyl phenol,4- (p-cresol)	106-44-5	350
Methyl tert butyl ether	1634-04-4	70
Metolachlor (Dual 8E/25G)	51218-45-2	70
Metribuzin (Sencor 75DF)	21807-64-9	100
Monochlorobenzene (Chlorobenzene)	108-90-7	100
Naphthalene	91-20-3	20
Nickel	7440-02-0	100
Nitrate	14797-55-8	10,000
Nitrite	14797-65-0	1,000
Oxamyl	23135-22-0	200
Pentachlorophenol	87-86-5	1
Phenanthrene	85-01-8	210
Phenol	108-95-2	4,000
Picloram	1918-02-1	500
Polychlorinated biphenyls (PCBs)	1336-36-3	0.5
Potassium	7440-09-7	35,000
Pyrene	129-00-0	210
Radium 226 and 228	7740-14-4	5 pCi/L
Selenium	7782-49-2	50
Silver	7440-22-4	50
Simazine	122-34-9	4
Strontium 90	7740-24-6	8 pCi/L
Styrene	100-42-5	100
Sulfate	14808-79-8	400,000
TCDD, 2,3,7,8- (Dioxin)	1746-01-6	0.00003
Tetrachloroethane, 1,1,1,2-	630-20-6	70
Tetrachloroethane, 1,1,2,2,-	79-34-5	0.17
Tetrachloroethylene (TCE)	127-18-4	5
Tetrahydrofuran	109-99-9	154
Thallium (thallium chloride)	7440-28-0	2

<p>Table 1500-1</p> <p>AMBIENT GROUNDWATER QUALITY STANDARDS</p>		
Chemical Name	CAS No.	NH GW-1 ug/l (ppb)
Toluene	108-88-3	1,000
Total Coliform	-	CTS/100ml
Toxaphene	8001-35-2	3
TP, 2,4,5- (Trichlorophenoxyacetic acid, 2,4,5-)	93-76-5	50
Trichlorobenzene, 1,3,5-	108-70-3	40
Trichlorobenzene, 1,2,4-	120-82-1	70
Trichloroethane, 1,1,1-	71-55-6	200
Trichloroethane, 1,1,2-	79-00-5	5
Trichloroethylene	79-01-6	5
Trichlorofluoromethane	75-69-4	2,000
Trichloromethane (Chloroform)	67-66-3	6
Trichlorophenol, 2,4,5-	95-95-4	700
Trichlorophenol, 2,4,6-	88-06-2	10
Trichloropropane, 1,2,3-	96-18-4	40
Trihalomethanes (total)		6
Tritium	10028-17-8	20,000 pCi/L
Vinyl chloride	75-01-4	2
Xylenes (mixed isomers)	1330-20-7	10,000

APPENDIX I

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